

**Electrical Screen Safety report to assess conformity to The Electrical Equipment  
(Safety) Regulations 2016**

**BS EN 60950-1:2006+A2:2013 Information technology equipment - Safety  
Part 1: General requirements**

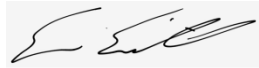
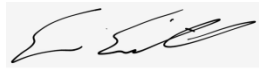
<b>Report Reference No.....:</b>	<b>CI07550V1.1</b>
<b>Date of issue .....</b>	<b>03 April 2018</b>
<b>Total number of pages.....:</b>	<b>9</b>
<b>Testing Laboratory .....</b>	<b>Cass Industries Ltd.</b>
<b>Address .....</b>	<b>Unit 1, Bankside Business Park, Coronation Street, Stockport, SK5 7PG</b>
<b>Customers name .....</b>	<b>eOpenbox TV Ltd.</b>
<b>Address .....</b>	<b>10 King Edwards Buildings, Bury Old Road, Salford, M7 4QJ</b>
<b>Test item description .....</b>	Direct plug in AC/DC adapter
<b>TSO Sample..... :</b>	N/A
<b>TSO Seal..... :</b>	N/A
<b>Manufacturer .....</b>	Shenzhen Guangkaiyuan Technology Co. Ltd.
<b>Model/Type reference.....:</b>	GKYP50200050UK1
<b>Ratings .....</b>	100-240Vac, 50/60Hz, 0.5A. Output 5Vdc 2000mA

**General disclaimer and 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.  
The authenticity of this Test Report and its contents can be verified by contacting the laboratory responsible for this Test Report.  
"(See Attachment #)" refers to additional information appended to the report.  
"(See appended table)" refers to a table appended to the report.  
List of test equipment must be kept on file and available for review.  
Additional test data and/or information provided in the attachments to this report.

**Throughout this report a decimal point is used as the decimal separator.**

**Only the clauses detailed in this report were examined. No assessment was made of any clauses not specifically referenced in this report. This report should be regarded as an electrical safety screen test only.**


<b>Testing procedure and testing location:</b>		
<b>Testing Laboratory:</b>	Cass Industries Ltd.	
<b>Testing location/ address .....</b>	Unit 1, Bankside Business Park, Coronation Street, Stockport, SK5 7PG	
<b>Tested by (name, signature) .....</b>	S. Smith	
<b>Approved by (name, signature) .....</b>	S. Smith	
<b>Verdict .....</b>	<b>PASS</b>	
<b>COMMENTS</b>		
No non-compliances with electrical safety requirements were observed.		
<b>GENERAL INFORMATION</b>		
<b>Testing</b>		
Date of receipt of test item(s) .....	26 <sup>th</sup> March 2018	
Date(s) tests performed .....	26 <sup>th</sup> March 2018	
<b>Possible test case verdicts:</b>		
- test case does not apply to the test object .....	N/A (not applicable)	
- test object does meet the requirement .....	Pass (P)	
- test object was not evaluated for the requirement .....	N/E (not examined)	
- test object does not meet the requirement .....	Fail (F)	
Note: Failures (F) are highlight in <b>red text</b> , items of note are highlighted in <b>yellow text</b>		
<b>GENERAL PRODUCT INFORMATION</b>		
Item examined was a direct plug in switch mode charger fitted with a DC coax output connector on a flying lead. The unit was supplied loose, without packaging or instructions. Instructions were subsequently provided via email for assessment.		

**Copy of rating plate / Photograph of equipment**

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective Certification Bodies that own these marks.



BS EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

<b>1</b>	<b>GENERAL REQUIREMENTS</b>		<b>P</b>
<b>1.5.6</b>	<b>Capacitors bridging insulation</b>		<b>P</b>
	<b>Capacitor bridging primary and secondary circuits Y1 rated, or 2x Y2</b>	Y1 rated capacitor bridging primary and secondary circuits	<b>P</b>
<b>1.7</b>	<b>Marking and instructions</b>		<b>P</b>
<b>1.7.1</b>	<b>Rated voltage</b>	100-240Vac	<b>P</b>
	<b>Rated frequency</b>	50/60Hz	<b>P</b>
	<b>Rated current</b>	0.5A	<b>P</b>
	<b>Manufacturers name</b>	Shown on rating plate	<b>P</b>
	<b>Manufacturers address</b>	Shown on separate label	<b>P</b>
	<b>Model identification or type reference</b>	GKYP50200050UK1	<b>P</b>
	<b>Class II equipment symbol (  )</b>	Shown on rating plate	<b>P</b>
	<b>CE mark</b>	Shown on rating plate	<b>P</b>
<b>1.7.2</b>	<b>Safety instructions and marking</b>		<b>P</b>
<b>1.7.2.1</b>	<b>General</b>	Adequate instructions provided	<b>P</b>
<b>1.7.11</b>	<b>Durability</b>	Marking legible and durable	<b>P</b>

<b>2</b>	<b>PROTECTION FROM HAZARDS</b>		<b>P</b>
<b>2.1</b>	<b>Protection from electrical shock and energy hazards</b>		<b>P</b>
<b>2.1.1.1</b>	<b>Accessibility of energised parts</b>	See appended Table 2.1.1.1	<b>P</b>
<b>2.1.1.4</b>	<b>Accessibility of single insulation wiring</b>		<b>P</b>
<b>2.6.3</b>	<b>Protective earthing</b>		<b>N/A</b>
<b>2.6.3.4</b>	<b>Resistance of protective earthing conductor</b>	See appended Table 2.6.3.4	<b>N/A</b>
<b>2.7.1</b>	<b>Overcurrent protection device</b>	Fusible resistor in live circuit	<b>P</b>
<b>2.9</b>	<b>Electrical insulation</b>		<b>P</b>
<b>2.10.3</b>	<b>Clearances</b>		<b>P</b>
<b>2.10.4</b>	<b>Creepages meet Table 2N</b>	3.9mm between live and neutral PCB tracks	<b>P</b>
	<b>Primary and secondary circuits 5mm</b>	7.1mm between primary and secondary PCB tracks	<b>P</b>
<b>2.10.5</b>	<b>Solid insulation</b>		<b>P</b>
<b>2.10.5.2</b>	<b>Minimum distances through insulation</b>	0.44mm through insulation	<b>P</b>

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<b>3</b>	<b>WIRING, CONNECTIONS AND SUPPLY</b>		<b>P</b>
<b>3.1.9</b>	<b>Termination of conductors</b>	Wiring adequately secured	<b>P</b>
<b>3.2</b>	<b>Connection to a mains supply</b>		<b>N/A</b>
<b>3.2.1.1</b>	<b>Mains plug meets dimensional requirements of BS 1363</b>		<b>N/A</b>
	<b>Mains plug markings</b>		<b>N/A</b>
	<b>Fuse link meets BS 1362 and is correctly rated</b>		<b>N/A</b>
<b>3.2.4</b>	<b>Appliance inlets and couplers</b>		<b>N/A</b>
	<b>C5 appliance coupler 3mm pin recess as per EN 60320</b>		<b>N/A</b>
	<b>C7 appliance coupler 3mm pin recess as per EN 60320</b>		<b>N/A</b>
	<b>C13 appliance coupler 5.7mm pin recess as per EN 60320</b>		<b>N/A</b>
<b>3.2.5</b>	<b>Power supply cords</b>		<b>N/A</b>
<b>3.2.5.1</b>	<b>Power supply cord correctly rated and CSA compliant with Table 3B</b>		<b>N/A</b>
<b>3.2.6</b>	<b>Cord anchorages and strain relief</b>		<b>N/A</b>

<b>4</b>	<b>PHYSICAL REQUIREMENTS</b>		<b>P</b>
<b>4.2.1</b>	<b>Mechanical strength</b>	Adequate	<b>P</b>
<b>4.3.1</b>	<b>Sharp edges and corners</b>	No sharp edges	<b>P</b>
<b>4.3.6</b>	<b>Direct plug in equipment plug portion meets dimensional requirements of BS 1363</b>	Fits BS 1363 gauge	<b>P</b>
<b>4.5.4</b>	<b>Touch temperature limits</b>	See appended Table 4.5.4	<b>P</b>

<b>5</b>	<b>ELECTRICAL REQUIREMENTS</b>		<b>P</b>
<b>5.2</b>	<b>Electric strength test</b>	See appended Table 5.2	<b>P</b>

TABLE: Power Input					<b>P</b>
Operating Conditions / Ratings	Voltage (V)	Frequency (Hz)	Current (A)	Power consumed (W or VA)	Exceeds 10% of rated power?
On load of 2000mA	240	50	/	13.1W	No
<b>Supplementary Information:</b>					

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Clause	Requirement + Test	Result - Remark	Verdict

2.1.1.1	TABLE: Determination of ACCESSIBLE live parts		P
Location	Determination method (NOTE1)	Comments	
Enclosure	Visual, Rigid test finger	No access to live parts	
<b>Supplementary information:</b> <sup>1)</sup> NOTE: The determination methods are: visual; rigid test finger; jointed test finger; test hook.			

2.6.3.4	TABLE: Impedance and current-carrying capability of PROTECTIVE EARTH CONNECTIONS				N/A
Type of EQUIPMENT & impedance measured between parts	Test current (A) /Duration (s)	Voltage drop measured between parts (V)	Maximum calculated impedance (mΩ)	Maximum allowable impedance (mΩ)	
<b>Supplementary information:</b>					

4.5.4	TABLE: Touch temperature limits				P
Model No. ....:	GKYPS0200050UK1				
Test ambient (°C) .....	20				
Test supply voltage/frequency (V/Hz) ....:	240/50				
Test conditions	Thermocouple location	Max allowable temperature from Table 4C	Max measured temperature, (°C)	Remarks	
30 minutes on load of 2000mA	Enclosure	95	38.2	Pass	
<b>Supplementary information:</b>					

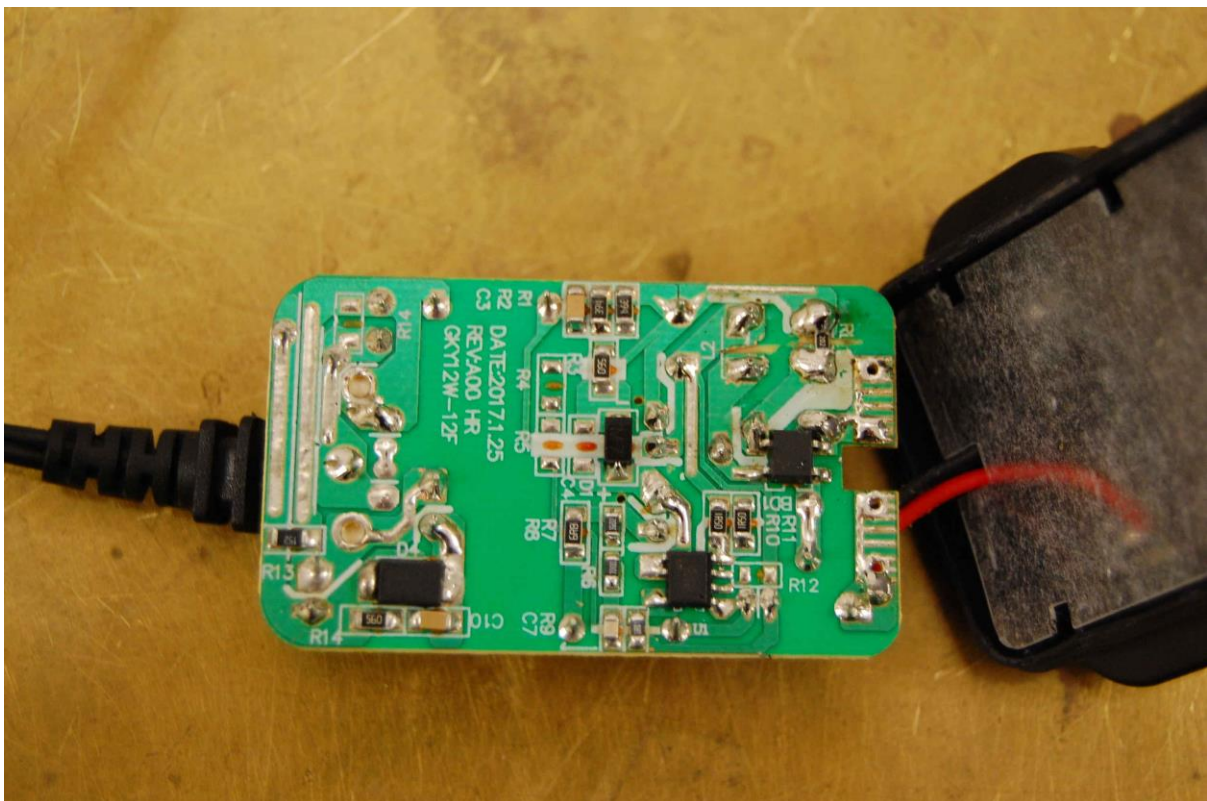
BS EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

5.2	TABLE: Electric strength test					
Insulation under test	Insulation Type	Reference Voltage		A.C. test voltages in V r.m.s	Dielectric breakdown after 1 minute Yes/No	
		PEAK WORKING VOLTAGE (U) V <sub>peak</sub>	PEAK WORKING VOLTAGE (U) V d.c.			
Live/Neutral to DC output connector	Reinforced	240	/	3000	No	
<b>Supplementary information:</b> Humidity conditioning in 5.4.8 not performed.						

	TABLE: DC output characteristics		P
Type of load	Output voltage		
Offload	5.2Vdc		
1000mA	5.0Vdc		
2000mA	5.0Vdc		
<b>Supplementary Information:</b> Maximum output current 2200mA			

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Additional photographs of Equipment Under Test (EUT):





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\*\*\*\*\*End of test report\*\*\*\*\*