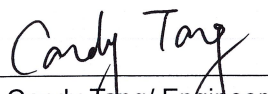


TEST REPORT


Applicant : Guangzhou HD Electronics Technology Co., Ltd.
Address : No.1 Jiaochanggang, Shiji Town, Panyu District, Guangzhou, Guangdong Province, 511450, P.R.China
Manufacturer : Guangzhou HD Electronics Technology Co., Ltd.
Address : No.1 Jiaochanggang, Shiji Town, Panyu District, Guangzhou, Guangdong Province, 511450, P.R.China
Product Name : LED TV
Trade Mark : WINSTAR
Model No. : 43SHD20
Ratings : Input: 100-240V~, 50/60Hz, ≤100W; Each USB output: 5V=500mA
Test procedures : Commission Regulation (EC) No 642/2009 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for Televisions.
 COMMISSION REGULATION (EU) No 801/2013 of 22 August 2013 amending (EC) No 642/2009 with regard to ecodesign requirements for televisions.
 COMMISSION REGULATION (EU) 2016/2282 of 30 November 2016 amending Regulations (EC) No 642/2009
 Commission Regulation (EU) No 1062/2010 of 28 September 2010 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of televisions
Test Standard : See summary of testing for details
 EN 50564:2011. Electrical and electronic household and office equipment — Measurement of low power consumption
Date of Receiver : December 24, 2019
Date of Test : December 21, 2018 to December 22, 2018
Date of Issue : January 09, 2020
Test Report Form No : NTCS-(EC) No 642/2009-A1-E
Test Result : Pass *

This Test Report is Issued Under the Authority of :

Compiled by


Candy Tang / Engineer

Approved & Authorized Signer




Ryan Luo / Authorized Signatory

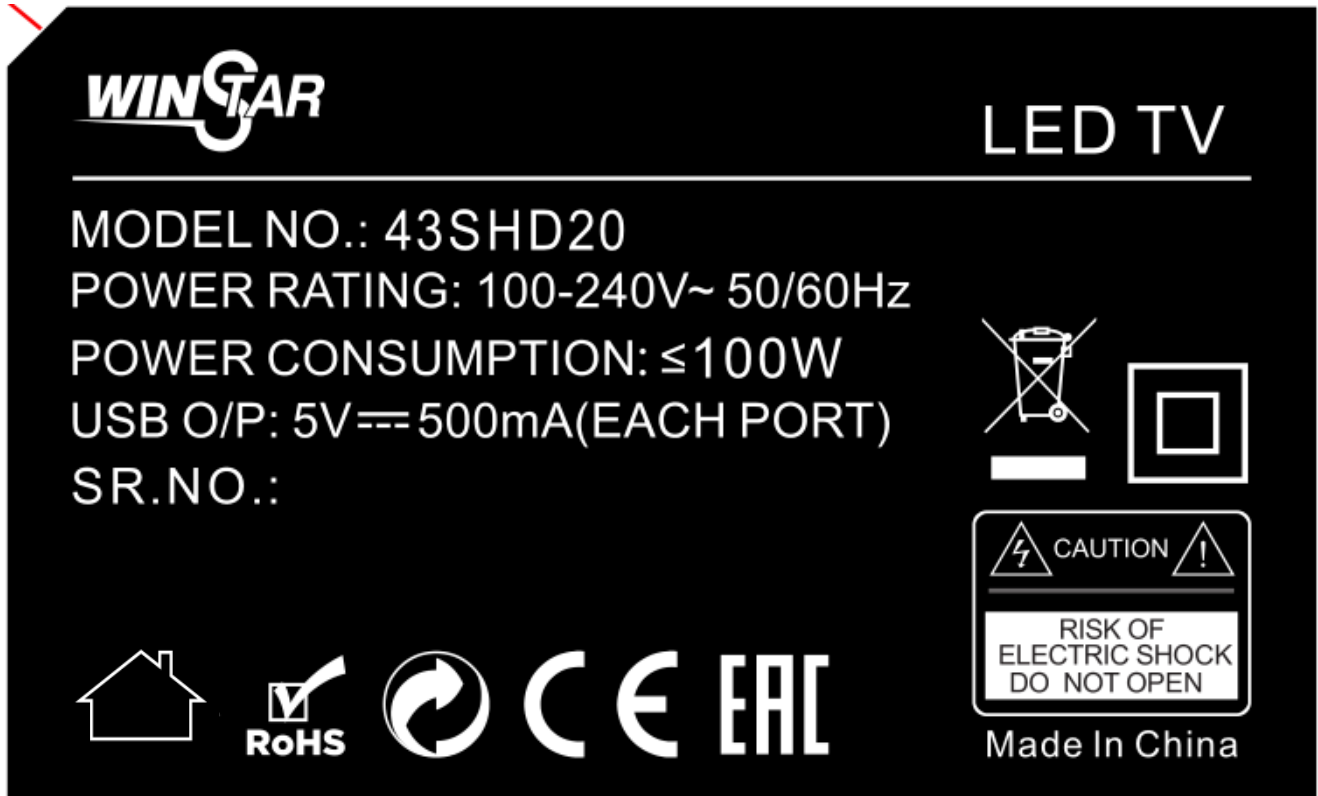
*Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of Dongguan Nore Testing Center Co., Ltd. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Revision History of This Test Report

Report Number	Description	Issued Date
NTC1812255SV00	Initial Issue	2019-01-02
NTC1812255SV01	See page 6	2020-01-09
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..
..

Copy of marking plate:



Remarks:

1. The above markings are the minimum requirements required by the safety standard. For the final production samples, the additional markings which do not give rise to misunderstanding may be added.
2. The CE marking and WEEE symbol should be at least 5.0mm and 7.0mm respectively in height.
3. Above markings are located at the rear enclosure of the apparatus.

Summary of testing:

The sample(s) tested complies with the requirements of COMMISSION REGULATION (EC) No 642/2009 and (EC) No 1062/2010.

Test Standard:

- EN 62087-1:2016 Audio, video, and related equipment — Determination of power consumption — General
- EN 62087-2:2016 Audio, video, and related equipment — Determination of power consumption — Signals and media
- EN 62087-3:2016 Audio, video, and related equipment — Determination of power consumption — Television sets

-Based on the tests and calculations made as described in this test report, a summary of test results is as tabulated below to determine Energy Efficiency Class for the product.

Pon(W)	Pstb(W)	Poff(W)	E(kWh)	EEl	Energy Efficiency Class
60	0.42	--	88	0.254911696	A
Manufacturer Declaration Data (Reference)					
68	0.5	--	99	0.288899922	A

Description of equipment under test:	
Classification of installation and use.....	: Class II
Supply Connection	: Non-detachable power cord with plug
Rated Voltage (V)	: 100-240V~
Rated Frequency (Hz)	: 50/60Hz
Power switch	: Without
Forced menu	: Without
Television screen diagonal size (cm)	: 108
Visible Screen Dimensions (mm)	: 43 inch
Visible Screen Area (A).....	: 49.8277868544 (dm ²)
Screen Technology.....	: <input checked="" type="checkbox"/> LCD(LED) <input type="checkbox"/> CRT <input type="checkbox"/> Plasma <input type="checkbox"/> LCD <input type="checkbox"/> DLP <input type="checkbox"/> Rear projection <input type="checkbox"/> Laser <input type="checkbox"/> OLED <input type="checkbox"/> LOOS
Resolution.....	: <input type="checkbox"/> Full HD resolution <input checked="" type="checkbox"/> Other resolution: 1366 x 768 Pixels
Product type	: <input checked="" type="checkbox"/> Television sets with one tuner/receiver and no hard disc <input type="checkbox"/> Television sets with hard disc(s) <input type="checkbox"/> Television sets with two or more tuners/receivers <input type="checkbox"/> Television sets with hard disc(s) and two or more tuners/receivers <input type="checkbox"/> Television monitors <input checked="" type="checkbox"/> Television can connect to a network and has one or more network ports
Network Connection	: <input type="checkbox"/> Wi-Fi <input type="checkbox"/> Ethernet (IEEE 802.3) <input type="checkbox"/> Wireless <input type="checkbox"/> Wired <input checked="" type="checkbox"/> RJ45 <input checked="" type="checkbox"/> PC Input <input checked="" type="checkbox"/> HDMI Input <input type="checkbox"/> WIRELESS Control <input type="checkbox"/> SCART Input <input checked="" type="checkbox"/> AV input <input type="checkbox"/> RS232 (Service)
Input terminal.....	: <input checked="" type="checkbox"/> USB Input <input type="checkbox"/> LAN <input checked="" type="checkbox"/> ANTENNA/CABLE Input <input type="checkbox"/> DVD Input <input checked="" type="checkbox"/> YPbPr Input <input checked="" type="checkbox"/> RJ45 Input <input type="checkbox"/> Other:
Input terminal for the audio and video test signals.....	: The dynamic broadcast-content video signal (as defined in EN 62087)
Sound Level was adjusted to 50mW at speaker's terminal	: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other
The mode used during testing was:	: The unit was operated on HDMI mode which is max. mode

Name of viewing picture mode.....:	<input checked="" type="checkbox"/> Home Mode: <input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> User <input type="checkbox"/> Normal <input type="checkbox"/> Dynamic <input checked="" type="checkbox"/> Movie <input type="checkbox"/> Mild <input type="checkbox"/> Natural <input type="checkbox"/> Personal <input type="checkbox"/> Home <input checked="" type="checkbox"/> Others: <u>vivid</u>
	<input type="checkbox"/> Shop mode / <input type="checkbox"/> Retail mode / <input type="checkbox"/> Store mode: <input type="checkbox"/> Standard <input type="checkbox"/> User <input type="checkbox"/> Normal <input type="checkbox"/> Dynamic <input type="checkbox"/> Movie <input type="checkbox"/> Mild <input type="checkbox"/> Natural <input type="checkbox"/> Personal <input type="checkbox"/> Others:
Measured peak luminance (cd/m²):	
Picture mode in Home Mode: (Preset picture setting)	Picture mode in <input type="checkbox"/> Shop mode / <input type="checkbox"/> Retail mode / <input type="checkbox"/> Store mode: (Preset picture setting)
Standard (Default as shipped)	200.1
Movie	170
vivid	219
User	200.1
Standard (Default as shipped)	N/A
Movie	N/A
vivid	N/A
User	N/A
A: L _{DEFAULT_HOME} at <u>Standard</u> mode	200.1
B: L _{BRIGHTEST_HOME} at <u>Vivid</u> mode	219
C: L _{DEFAULT_RETAIL} at <u>Standard</u> mode	N/A
D: L _{BRIGHTEST_RETAIL} at <u>Vivid</u> mode	N/A
E: Brightest Selectable Preset Picture Setting (the greater value of L _{high}) at <u>Vivid</u> mode	219
Ratio of (A / E) X 100%	91.37%
Name of the recommended home viewing picture mode :	Standard
Name of brightest picture mode:	Vivid
Remark: This configuration selection is generally recommended by the manufacturer for presentation in a public space when the television set is offered for sale and might be named "retail", "store", "shop", or equivalent.	

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)

General remarks:

"(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 is used as the decimal separator.

Remark:

1. When determining for test conclusion, measurement uncertainty of tests has been considered.
2. Measurements of power of 0.50 W or greater was made with an uncertainty of less than or equal to 2 % at the 95 % confidence level.
3. Measurements of power of less than 0.50 W was made with an uncertainty of less than or equal to 0.01 W at the 95 % confidence level.

History and modification (Dated 2019-12-26):

This report is based on report No. NTC1812255SV00 (dated on 2019-01-02) issued by Dongguan Nore Testing Center Co., Ltd.

-- Descriptions of changes:

Change model No. NTV4316SLED, DLED43D15A, DLED43D19A to 43SHD20.

Change trade mark NIKAI, HUIDI to WINSTAR.

Change new appearance, see photo.

-- For above changes/modification, no tests need to carry out.

General product information:

1. The product covered in this report is a 43 inch LED TV for indoor use only.
2. Models NTV4316SLED, DLED43D15A, DLED43D19A are the same except for the model number difference.
3. All tests were conducted on model NTV4316SLED to represent the other models.

ECODESIGN REQUIREMENTS of (EC) No. 642/2009+ (EU) No. 801/2013

Clause	Requirement + Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

1. ON-MODE POWER CONSUMPTION

1	From 20 August 2010:		P
1.1	From 1 April 2012: The on-mode power consumption of a television with visible screen area A expressed in dm ² shall not exceed the following limits:	See below	P
	Television sets 16 Watts + A · 3,4579 Watts/dm ²	Requirement : 188.3W; Measurement: 60W	P
	Television monitors 12 Watts + A · 3,4579 Watts/ dm ²	No such equipment	N

2. STANDBY/OFF MODE POWER CONSUMPTION

2.1	From 20 August 2011:		P
2.1.(a)	Power consumption in 'off-mode': Power consumption of televisions in any off-mode condition shall not exceed 0,30 Watts, unless the condition in the next paragraph is fulfilled.	No off mode	N
	Power consumption of televisions in any off-mode condition shall not exceed 0,30 Watts, unless the condition in the next paragraph is fulfilled.		N
2.1. (b)	Power consumption in 'standby-mode(s)': The power consumption of televisions in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 0,50 Watts.	Measured : 0.42W	P
	The power consumption of televisions in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display, shall not exceed 1,00 Watt.		N

ECODESIGN REQUIREMENTS of (EC) No. 642/2009+ (EU) No. 801/2013			
Clause	Requirement + Test	Result - Remark	Verdict
2.1. (c)	Availability of off-mode and/or standby-mode: Televisions shall have an off-mode and/or standby-mode, and/or another condition which does not exceed the applicable power consumption requirements for off-mode and/or standby-mode when the television is connected to the mains power source.		P
2.1. (d)	Automatic power-down: Televisions shall provide a function with the following characteristics		P
2.1. (d) (i)	after no more than 4 hours in on mode following the last user interaction and/or a channel change, the television shall be automatically switched from on mode to: — standby-mode, or, — off-mode, or, — another condition which does not exceed the applicable power consumption requirements for off-mode and/or standby mode;	Set to standby by remote control.	P
2.1. (d) (ii)	televisions shall display an alert message before the automatic switch from on mode to the applicable condition/modes.	Complied	P
	This function shall be set as default.		P
2.1. (e)	For television sets which consist of a display, and one or more tuner(s)/receiver(s) and optional additional functions for data storage and/or display such as digital versatile disc (DVD), hard disk drive (HDD) or videocassette recorder (VCR) in a separate unit, points (a) to (d) apply for the display and the separate unit individually.		N
3. NETWORKED STANDBY POWER CONSUMPTION			P
	For networked televisions, the following requirements shall apply:		P
3.1	As of 1 January 2015		P
3.1. (a)	Possibility to deactivate wireless network connection(s)		P
3.1. (b)	Power management for networked televisions Networked televisions shall provide a function with the following characteristics:		P

ECODESIGN REQUIREMENTS of (EC) No. 642/2009+ (EU) No. 801/2013

Clause	Requirement + Test	Result - Remark	Verdict
	After no more than 4 hours in on mode following the last user interaction and/or a channel change, the television shall be automatically switched from on mode to a condition of networked standby or any other condition which does not exceed the applicable power consumption requirements for conditions providing networked standby.		P
	Televisions shall display an alert message before the automatic switch from on mode to the applicable condition/modes. This function shall be set as default.		P
	In a condition providing networked standby, the power management function may switch the television automatically into standby mode, or off mode or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode.		P
	The power management function, or a similar function, shall be available for all network ports of the networked television.		P
	The power management function, or a similar function, shall be activated, unless all wireless network ports are deactivated. In that case the power management function, or a similar function, shall be activated if any one of the network ports is activated.		P
3.1. (c)	A networked television that has one or more standby modes shall comply with the requirements for these standby mode(s) when all wireless network ports are deactivated.		N
3.1. (d)	Power consumption in a condition providing networked standby:		N

ECODESIGN REQUIREMENTS of (EC) No. 642/2009+ (EU) No. 801/2013			
Clause	Requirement + Test	Result - Remark	Verdict
	The power consumption of television with HiNA functionality, in a condition providing networked standby into which the television is switched by the power management function, or a similar function, shall not exceed 12,00 W.		N
	The power consumption of televisions without HiNA functionality in a condition providing networked standby into which the television is switched by the power management function, or a similar function, shall not exceed 6,00 W.		N
3.2	As of 1 January 2017:		P
3.2.(a)	A networked television that has one or more standby modes shall comply with the requirements for these standby mode(s) when all wired network ports are disconnected and when all wireless network ports are deactivated.		P
3.2. (b)	A networked television shall comply with the provisions under 2.2(d) when all wired network ports are disconnected and when all network ports are deactivated.		P
3.2.(c)	Power consumption in a condition providing networked standby: The power consumption of television with HiNA functionality, in a condition providing networked standby into which the television is switched by the power management function, or a similar function, shall not exceed 8,00 W.		N
	The power consumption of televisions without HiNA functionality in a condition of networked standby into which the television is switched by the power management function, or a similar function, shall not exceed 3,00 W.	Measured : 0.42W (Press the power button on remote control, then the unit turn to standby mode.)	P
3.3	As of 1 January 2019		N

ECODESIGN REQUIREMENTS of (EC) No. 642/2009+ (EU) No. 801/2013			
Clause	Requirement + Test	Result - Remark	Verdict
	The power consumption of televisions without HiNA functionality in a condition of networked standby into which the television is switched by the power management function, or a similar function, shall not exceed 2,00 W.		N
4	'HOME-MODE' FOR TELEVISIONS WHICH ARE DELIVERED WITH A FORCED MENU		N
	From 20 August 2010: Televisions with forced menu on initial activation of the television shall provide a 'home-mode' in the forced menu, which shall be the default choice on initial activation of the television. If the user selects a mode other than 'home-mode' on initial activation of the television, a second selection process shall be prompted to confirm this choice.	Not provided	N
5	PEAK LUMINANCE RATIO		P
	From 20 August 2010:	See below	P
	- Televisions without forced menu: the peak luminance of the on-mode condition of the television as delivered by the manufacturer shall not be less than 65 % of the peak luminance of the brightest on-mode condition provided by the television.		N
	- Televisions with forced menu: the peak luminance of the home-mode condition shall not be less than 65 % of the peak luminance of the brightest on-mode condition provided by the television.	Peak Luminance Ratio: 91.37%; Home mode (standard mode): 200.1cd/m ² ; brightest on-mode (vivid mode): 219cd/m ²	P

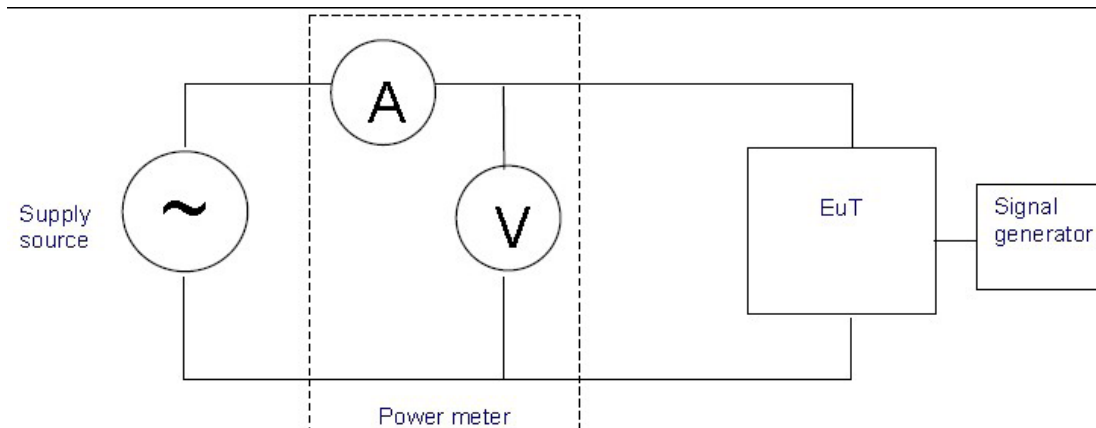
Table 1	Test parameters for measurements	
The measurement method used	EN 62087	
Test ambient temperature (°C)	23.3	
Test voltage in V and frequency in Hz	230V~, 50Hz	
Total harmonic distortion (THD) of the electricity supply system	0.9%	
Input terminal for the audio and video test signals	The dynamic broadcast-content video signal (as defined in EN 62087)	
Set-up and circuits used for electrical testing:		
		

Table 2	Test result		P
Operating mode(s)	Measured (W)	Limit (W)	
Off-mode condition	--	1.0 (from 07.01.2010)	0.3 (from 20.08.2011)
For televisions with an easily visible switch, which puts the television in a condition with power consumption not exceeding 0.01Watts when operated to the off position	--	0.5 (from 20.08.2011)	
Power consumption in 'standby mode(s)' in			
any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function	0.42	1.0 (from 07.01.2010)	0.5 (from 20.08.2011)
any condition providing only information or status display, or providing only a combination of reactivation function and information or status display	--	1.0 (from 20.08.2011)	

Description of how the appliance mode was selected or programmed		During on mode, press the power button on remote control or the unit turn to standby mode.	
Sequence of events to reach the Mode where the equipment automatically changes modes.		--	
On-mode condition		HDMI mode (Characteristics of the dynamic broadcast-content video signal representing typical broadcast TV content)	
On-model power consumption(W)		60	
From 20 August 2010:			
	Full HD resolution	All other resolutions	Calculating the result
Television sets	20 Watts + A · 1,12 · 4,3224 Watts/dm ²	20 Watts + A · 4,3224 Watts/dm ²	--
Television monitors	15 Watts + A · 1,12 · 4,3224 Watts/dm ²	15 Watts + A · 4,3224 Watts/dm ²	--
From 1 April 2012:			
	All resolutions		Calculating the result
Television sets	16 Watts + A · 3,4579 Watts/dm ²		188.3
Television monitors	12 Watts + A · 3,4579 Watts/dm ²		--
Sequence of steps for achieving a stable condition with respect to power consumption		Measurements shall be made after the television has been in the standby-mode for a minimum of 1 hour immediately followed by a minimum of 1 hour in the on-mode and shall be completed before a maximum of 3 hours in on-mode. The relevant video Signal shall be displayed during the entire on-mode duration.	
Peak luminance of the on-mode		200.1 cd/m ²	
Peak luminance of the brightest on-mode condition provided by the television		219 cd/m ²	
Ratio of the peak luminance		91.37%	>65%
Duration of the on-mode condition before the television reaches automatically standby or off-mode		--	
Result:	Complies with the ecodesign requirements of Annex I of COMMISSION REGULATION (EC)No 642/2009		

**COMMISSION DELEGATED REGULATION (EU) No 1062/2010
- Energy Labelling of Televisions**

Clause	Requirement + Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

Energy efficiency class	Energy Efficiency Index	Value	Verdict
A+++ (most efficient)	EEI < 0,10	--	--
A++	0,10 ≤ EEI < 0,16	--	--
A+	0,16 ≤ EEI < 0,23	--	--
A	0,23 ≤ EEI < 0,30	0.254911696	P
B	0,30 ≤ EEI < 0,42	--	--
C	0,42 ≤ EEI < 0,60	--	--
D	0,60 ≤ EEI < 0,80	--	--
E	0,80 ≤ EEI < 0,90	--	--
F	0,90 ≤ EEI < 1,00	--	--
G (least efficient)	1,00 ≤ EEI	--	--

Note: The Energy Efficiency Index (EEI) is calculated as $EEI = P/P_{ref}(A)$, where:

- $P_{ref}(A) = P_{basic} + A \times 4.3224 \text{ Watts/dm}^2$,

- $P_{basic} = 20 \text{ Watts}$ for television sets with one tuner/receiver and no hard disc,

- $P_{basic} = 24 \text{ Watts}$ for television sets with hard disc(s),

- $P_{basic} = 24 \text{ Watts}$ for television sets with two or more tuners/receivers,

- $P_{basic} = 28 \text{ Watts}$ for television sets with hard disc(s) and two or more tuners/receivers,

- $P_{basic} = 15 \text{ Watts}$ for television monitors,

- A is the visible screen area expressed in dm^2 ,

- P is the on-mode power consumption of the television in Watts measured in accordance with Annex VII,

rounded to one decimal place.

Annual energy consumption

--	Formula	Annual energy consumption	Verdict
On mode	$E = 1.46 \times P$	88	P

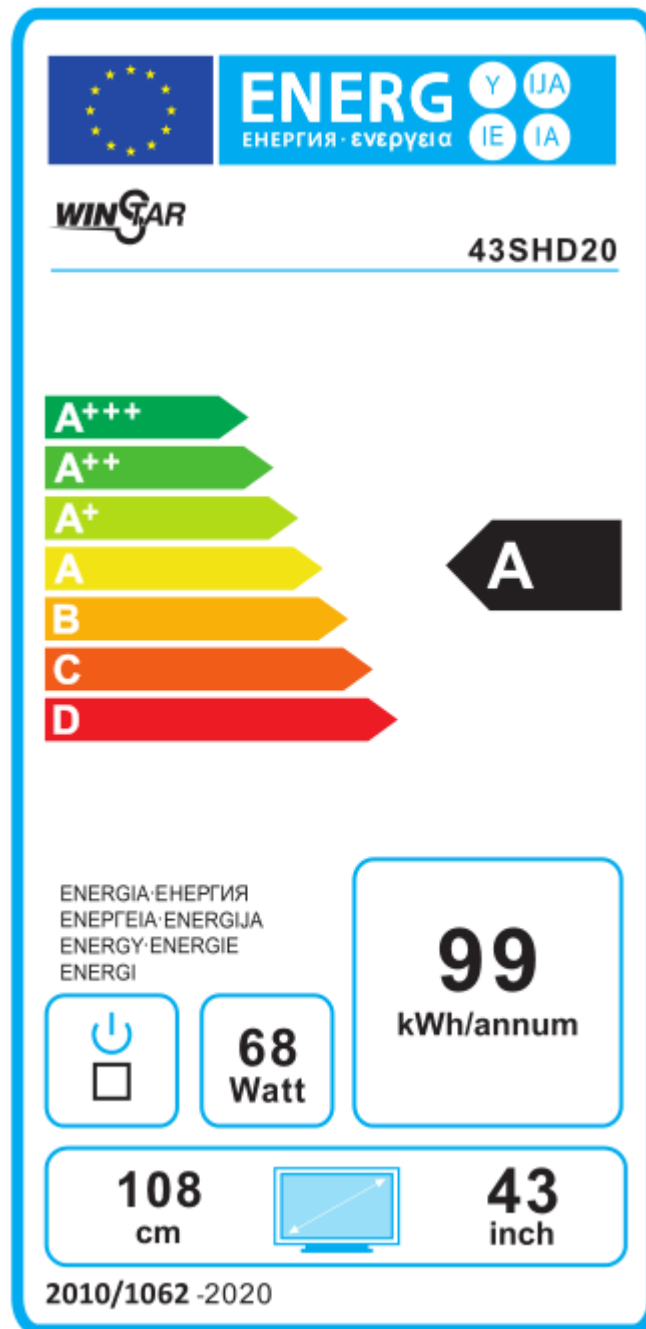
Note:

1. The annual on-mode energy consumption E in kWh.

2. P is the on-mode power consumption of the television in Watts measured in accordance with Annex VII, rounded to one decimal place.

3. The annual energy consumption calculated in accordance with Annex II in kWh per year, rounded to the first integer; it shall be described as: 'Energy consumption XYZ kWh per year, based on the power consumption of the television operating 4 hours per day for 365 days. The actual energy consumption will depend on how the television is used.'

Energy Efficiency Mark of Product:



Equipment Used during Test :

Instrument	Model/Type	Cal. Date	Cal. Due Date
Digital Power Meter	WT210	2018/3/23	2019/3/22
Luminance Meter	LS-100	2018/8/17	2019/8/16
Digital Oscilloscope	TDS220	2018/3/23	2019/3/22
Temperature & Humidity Meter	TA328	2018/6/4	2019/6/3
Stop watch	PC396	2018/3/24	2019/3/23
Digital anemometer	P6-8901	2018/7/25	2019/7/24

Photo documentation
Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8

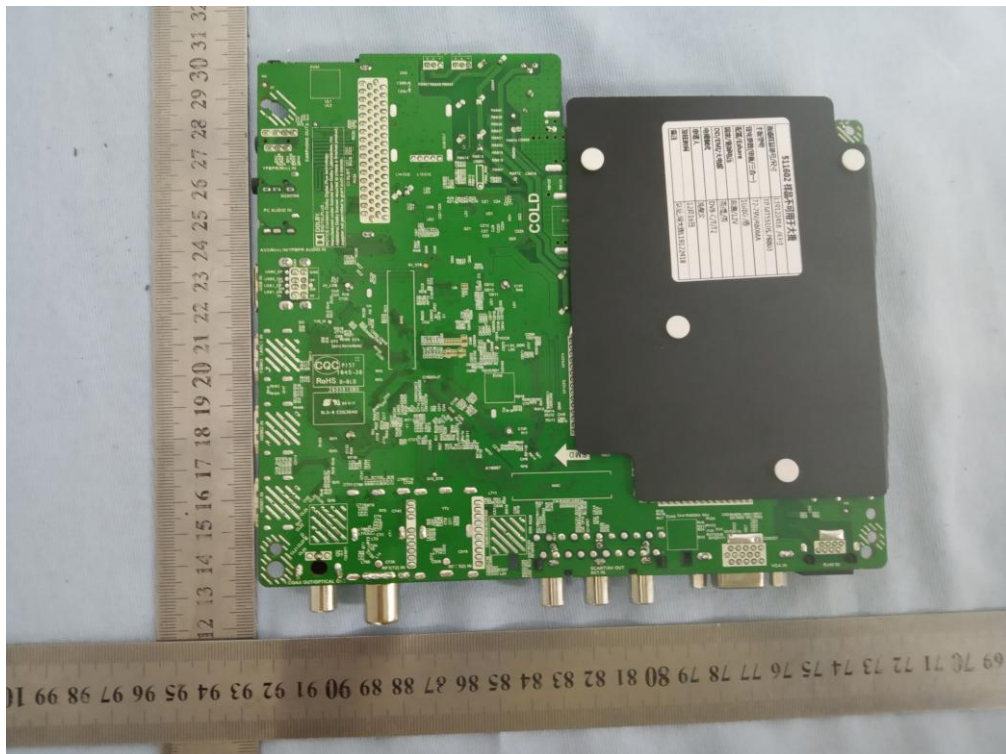
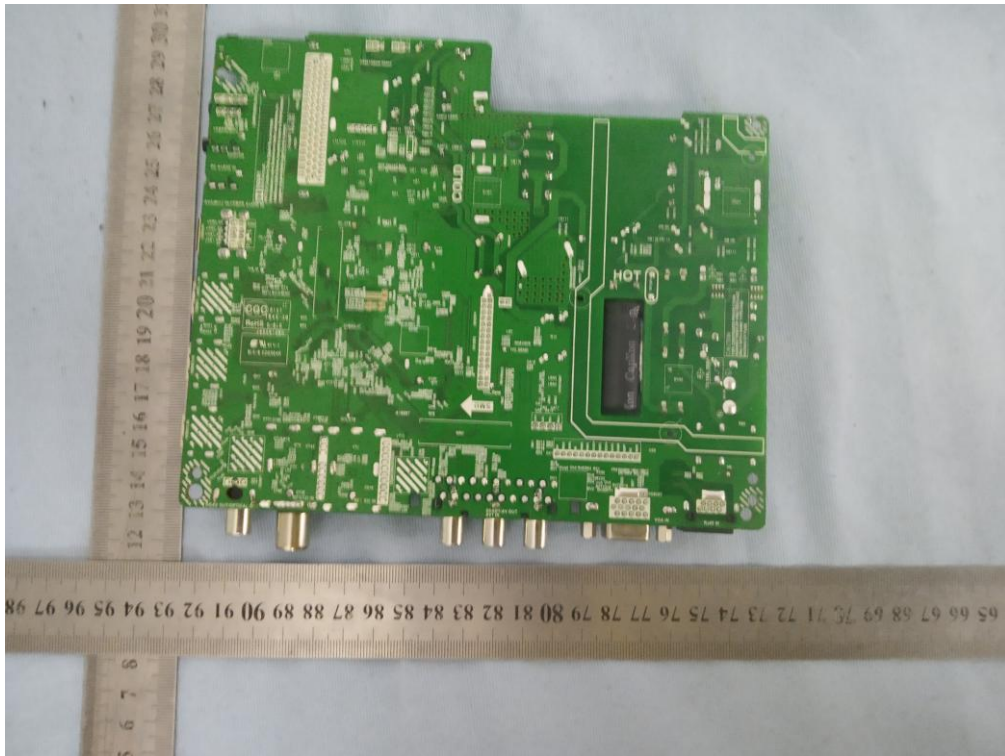


Photo 9



--- END OF THIS REPORT---