



# Technical Documentation for power measurements of Televisions according to Ecodesign & Energy Label Regulations

## Report

Documentation name .....	ENERGY-AN-BETA2
Documentation number .....	AR-203159-00
Documentation reference number .....	43AN***BETA2
General description of the model allowing it to be unequivocally and easily identified;	LED Backlight LCD TV
Directive .....	2009/125/EC
Regulations .....	2017/1369/EU: Framework for Energy Labelling 2019/2021/EU: Ecodesign Requirements for Electronic Displays 2019/2013/EU: Energy Labelling of Electronic Displays amending 2008/1275/EC Ecodesign Requirements for Standby and Off Mode Electric Power Consumption of Electrical and Electronic Household and Office Equipment and amending amending 801/2013/EC
References to the harmonised standards applied, other measurement standards.....	EN 62087-2:2016, EN 62087-3:2016, EN 50564:2011 modified by 2019/2021/EC Annex III and Annex IIIa
Specifications used in measuring the technical parameters and calculations performed .....	On Mode: Average-Dynamic Pat., 1 hr OFF 1 hr ON Standby Mode: Average, 20 min. Warm and 20 min measuring
The details and the results of calculations performed in accordance with Annex IV .....	$\text{Peak white luminance ratio} = \frac{\text{Peak white luminance of the normal configuration (24)}}{\text{Peak white luminance of the brightest on mode configuration (25)}} \times 100$ Percentage of power reduction due to ABC action between the 100 lux and 12 lux = $1 - \frac{\text{On mode power at 12 lux ambient light at ABC sensor (33)}}{\text{On mode power at 100 lux ambient light at ABC sensor (32)}} \times 100$
Testing conditions if not described sufficiently in point (2)	To put into standby, on/off button should be pressed for 5 seconds

## General

Parameter	Declared Value	Unit
Supplier's name or trade mark:	GRUNDIG	
Model identifier:	43 VCE 223 AT9T00	
Energy efficiency class for standard dynamic range (SDR)	G	
On mode power demand in standard dynamic range (SDR)	54,5	W
Energy efficiency class for High Dynamic Range (HDR), if implemented	G	
On mode power demand in High Dynamic Range (HDR)	57,5	W
Off mode, power demand	N/A	
Standby mode power demand	0,50	W
Networked standby mode power demand	2,0	W
Electronic display category	Television	
Size ratio	16:9	
Screen resolution	3840 x 2160	Pixel
Screen diagonal	108	cm
Screen diagonal	43	inches
Visible screen area	49,8	dm <sup>2</sup>
Panel technology used	LED LCD	
Automatic Brightness Control (ABC) available	No	
Voice recognition sensor available	No	
Room presence sensor available	No	
Image refresh frequency rate (normal configuration)	50	Hz
Minimum guaranteed availability of software and firmware updates (from the date of end of the placement on the market (as set out in Annex II E, point 1 of Commission Regulation (EU) 2019/2021)	8	Years
Minimum guaranteed availability of spare parts (from the date of end of the placement on the market, as set out in Annex II E, point 1 of Commission Regulation (EU) 2019/2021):	7	Years
Minimum guaranteed product support (from the date of end of the placement on the market, as set out Annex II E, point 1 of Commission Regulation (EU) 2019/2021):	7	Years
Minimum duration of the general guarantee offered by the supplier	2	Years

Parameter	Declared Value		Unit
<b>for on mode:</b>			
Peak white luminance of the brightest on mode configuration	200,0		cd/m2
Peak white luminance of the normal configuration	130,0		cd/m2
Peak white luminance ratio	$(130,0 / 200,0) * 100$	65,0	%
<b>For Auto Power Down (APD)</b>			
Length of time in on mode before the electronic display automatically switches to standby, off mode, or another condition which does not exceed the applicable power demand requirements for off mode or standby mode.	235:08		
For televisions: the length of time, following the last user interaction, before the television automatically switches to standby, off- mode, or another condition which does not exceed the applicable power consumption requirements for off-mode or standby- mode;	235:08		
For televisions equipped with room presence sensor: the length of time, when no presence is detected, before the television automatically switches to standby, off- mode, or another condition which does not exceed the applicable power demand requirements for off mode or standby mode;	N/A		
For electronic displays other than televisions and broadcast displays: the length of time, when no input is detected, before the electronic display automatically switches to standby, off-mode, or another condition which does not exceed the applicable power consumption requirements for off mode or standby mode;	N/A		
<b>For ABC (If available and activated by default)</b>			
Percentage of power reduction due to ABC action between the 100 lux and 12 lux ambient light conditions	$(1 - N/A / N/A) * 100$	N/A	%
On mode power at 100 lux ambient light at the ABC sensor	N/A		W
On mode power at 12 lux ambient light at the ABC sensor	N/A		W
Screen luminance at 100 lux ambient light at the ABC sensor (*)	N/A		cd/m2
Screen luminance at 60 lux ambient light at the ABC sensor (*)	N/A		cd/m2
Screen luminance at 35 lux ambient light at the ABC sensor (*)	N/A		cd/m2
Screen luminance at 12 lux ambient light at the ABC sensor (*)	N/A		cd/m2
<b>For Power Supply</b>			
Power supply type	Internal		
Standard references (if relevant)	N/A		
Input voltage	N/A		V
Output voltage	N/A		V
Input current (max)	N/A		A
Output current (min)	N/A		A
Plastics Exempted from marking	N/A		