

(EU) 2019/2013 Test and verification results:

Method for calculating the Energy Efficiency Index Annex II:

Clause	Description	Result - Remark								
1	A: The viewing surface area in dm ²	207.36 dm ²								
2	$P_{measured}$: The measured power in on mode in Watts in the normal configuration and set as indicated in Table 2									
	$P_{measured\ SDR}$: Power demand in Watts (W) in on mode, measured when displaying standardised test sequences of moving picture from dynamic broadcast content.	209.8W								
	$P_{measured\ HDR}$: Power demand in Watts (W) in on mode, measured as for $P_{measured\ SDR}$ but with the HDR functionality activated by metadata in the standardised HDR test sequences.	N/A								
3	<p>Correction factor set as indicated in Table 3.</p> <p style="text-align: center;">Table 3 <i>corr₁</i> value</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Electronic Display type</th> <th style="width: 50%;"><i>corr₁</i> value</th> </tr> </thead> <tbody> <tr> <td>Television</td> <td>0,0</td> </tr> <tr> <td>Monitor</td> <td>0,0</td> </tr> <tr> <td>Digital signage</td> <td>0,00062*(lum-500)*A <small>where 'lum' is the peak white luminance, in cd/m², of the brightest on mode configuration of the electronic display and A is the screen area in dm²</small></td> </tr> </tbody> </table>	Electronic Display type	<i>corr₁</i> value	Television	0,0	Monitor	0,0	Digital signage	0,00062*(lum-500)*A <small>where 'lum' is the peak white luminance, in cd/m², of the brightest on mode configuration of the electronic display and A is the screen area in dm²</small>	$corr_1 = 0$
Electronic Display type	<i>corr₁</i> value									
Television	0,0									
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Digital signage	0,00062*(lum-500)*A <small>where 'lum' is the peak white luminance, in cd/m², of the brightest on mode configuration of the electronic display and A is the screen area in dm²</small>									
4	<p>Energy Efficiency Index (EEI_{label}):</p> $EEI_{label} = \frac{(P_{measured} + 1)}{(3 \times [90 \times \tanh(0,025 + 0,0035 \times (A - 11)) + 4] + 3) + corr_1}$	EEI _{label} : 1.16								
5	<p>Electronic displays with automatic brightness control (ABC) shall qualify for a 10 % reduction in $P_{measured}$ if they meet all of the following requirements:</p> <ol style="list-style-type: none"> ABC is enabled in the normal configuration of the electronic display and persists in any other standard dynamic range configuration available to the end user; the value of $P_{measured}$, in the normal configuration, is measured, with ABC disabled or if ABC cannot be disabled, in an ambient light condition of 100 lux measured at the ABC sensor; if applicable, the value of $P_{measured}$ with ABC disabled shall be equal to or greater than the on mode power measured with ABC enabled in an ambient light condition of 100 lux measured at the ABC sensor; with ABC enabled, the measured value of the on mode power must decrease by 20 % or more when the ambient light condition, measured at the ABC sensor, is reduced from 100 lux to 12 lux; 	N/A								

	<p>e. the ABC control of the display screen luminance meets all of the following characteristics when the ambient light condition measured at the ABC sensor changes:</p> <ul style="list-style-type: none"> -- the measured screen luminance at 60 lux is between 65 % and 95 % of the screen luminance measured at 100 lux; -- the measured screen luminance at 35 lux is between 50 % and 80 % of the screen luminance measured at 100 lux; -- the measured screen luminance at 12 lux is between 35 % and 70 % of the screen luminance measured at 100 lux. 	
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Energy efficiency class, Annex I:

The energy efficiency class of the apparatus shall be determined on the basis of its EEI as set out in Table 1 as following:

Table 1
Energy efficiency classes of electronic displays

Energy Efficiency Class	Energy Efficiency Index (EEI_{label})
A	$EEI_{label} < 0,30$
B	$0,30 \leq EEI_{label} < 0,40$
C	$0,40 \leq EEI_{label} < 0,50$
D	$0,50 \leq EEI_{label} < 0,60$
E	$0,60 \leq EEI_{label} < 0,75$
F	$0,75 \leq EEI_{label} < 0,90$
G	$0,90 \leq EEI_{label}$

SDR kWh/1000h	EEI(HDR)	EEI(SDR)	EEI Energy Efficiency Class(HDR)	Energy Efficiency Class(SDR)
Laboratory test value				
209.8	N/A	1.16	N/A	G