

ACER Product Carbon Footprint (PCF) Information Sheet

Commercial Name	LCD Monitor	
Model Number	B277U G	
Issue Date	2025-02-20	

Product Environmental Attributes																			
(a) Product Carbon Footprint Value:	254.55 kg of CO ₂ e (see Note 1 below)																		
(b) Product Picture:	(c) Life Cycle Detail by Life Stage (Pie Chart):																		
	Expected Product Lifetime: 3 years (kg CO₂e/pcs) <table><tr><th>Life Stage</th><th>Value (kg CO₂e)</th><th>Percentage (%)</th></tr><tr><td>Raw materials</td><td>205.65</td><td>80.79%</td></tr><tr><td>Use</td><td>47.76</td><td>18.76%</td></tr><tr><td>End-of-Life</td><td>1.12</td><td>0.44%</td></tr><tr><td>Transport</td><td>0.03</td><td>0.01%</td></tr><tr><td>Manufacture</td><td>0.0036</td><td>0.00%</td></tr></table>	Life Stage	Value (kg CO ₂ e)	Percentage (%)	Raw materials	205.65	80.79%	Use	47.76	18.76%	End-of-Life	1.12	0.44%	Transport	0.03	0.01%	Manufacture	0.0036	0.00%
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Note 1:

Disclaimer:

All estimates of carbon footprint are uncertain.

This information sheet contains a description of the carbon footprint data for this declared product, which is based on estimates of the current state of the product life cycle, but is subject to known or unknown risks or uncertainties, so actual results may be different from the statement.

Note 2:

This product is based on the ISO 14040:2006/And 1:2020&ISO 14044:2006/And 2:2020&PAS2050:2011 & ISO 14067:2018 standard for carbon footprint inventory and calculation.

And this product use SimaPro 9.6.0.1 for PCF calculation tool. The lifecycle impact assessment methodology follows the IPCC 100-year Greenhouse Gas Emissions Assessment Method (IPCC 2021 GWP 100a) to calculate the CO₂ emission equivalent of a product from raw material extraction to product disposal (Cradle to Grave).

Note 3:

This calculation was based upon an Acer B277U G with the assumptions and configuration described in the calculation assumptions in the next page.

Note 4:

This pie chart provides the percent contribution of the mean value for each element of the analysis for the full life cycle CO₂e impacts of the product. If individual elements displaying 0% are less than 0.1%.

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Assumption Table			
Category	Element	Unit	Input
Product Specifics	Product Weight	kg	8.50
	Form Factor	no unit	1920 x 1080
	Screen Size	inches	27
	Product Lifetime	years	3
	Standby Mode & Power-On Mode	w	0.5 & 22
	Estimated standby hour & usage hour	hr	8 & 8
	Estimated total annual standby and power-on consumption	kw	45.00
Location	Assembly Location	no unit	CN
	Use Location	no unit	GLO
Transport from Assembly to Customer	To country of use: by air	fraction	0
	To country of use: by ship	fraction	1
	To country of use: by rail	fraction	0
	To country of use: by truck	fraction	0
	In country of use: by air	fraction	0
	In country of use: by ship	fraction	0
	In country of use: by rail	fraction	0
	In country of use: by truck	fraction	0
End of Life	Waste incineration	%	20
	Material recycling	%	80
The PCF value is calculated using the specific attributes above for assembly, use and transportation mode.			

Notes:

Life Cycle Analysis (LCA) can be grouped into five categories which include Raw Material, Manufacture, Transport, Use, and End-of-Life. Below is a brief description of each phase.

Raw Material: This life cycle phase captures emissions generated during the extraction, production, and transport of raw materials.

Manufacture: This life cycle phase captures emissions generated during the manufacture of subassemblies (including the product packaging) and product assembly.

Transport: Emissions included in the distribute phase include all those generated during the air, ocean or land distribute of finished or semi-finished Acer products between Acer facilities and from Acer facilities to customers.

Use: In use energy consumption is calculated in accordance with the U.S. Environmental Protection Agency's Energy Star® Typical Energy Consumption (TEC) methodology. Calculated energy consumption is then used in combination with average emissions factors for the designated country of use to calculate emissions.

End-of-life: The recycle rate is calculated based on the company's own calculated WEEE recycle rate. It is also assumed that the balance of the product waste materials is disposed of by incineration. Emissions generated during the mechanical destruction, separation and transport of end-of-life materials are included in the calculation.