



## Greenhouse Gas Verification Statement Number UK.VOL.INV.0148.2023

The inventory of Greenhouse Gas emissions in the period 1<sup>st</sup> November 2022 to 31<sup>st</sup> October 2023 of:

### Ciena

7035 Ridge Road,  
Hanover,  
MD21076 USA

has been verified in accordance with ISO 14064-3:2019 as meeting the principles of Transparency, Accuracy, Consistency and Relevance to represent a total amount of:

<b>Scope 1</b>	<b>2,110 tCO<sub>2</sub>e</b>
<b>Scope 2</b>	<b>32 tCO<sub>2</sub>e</b> (Market Based)
<b>Scope 2</b>	<b>14,312 tCO<sub>2</sub>e</b> (Location Based)
<b>Scope 3</b>	<b>2,425,246 tCO<sub>2</sub>e</b>

#### For the following activities

Manufacturing, research and development and office facilities and / or laboratory facilities, product transportation, employee commuting, business travel, contract manufacturing (purchased goods and services), fuel and energy related activities and waste disposal.

Lead Assessor: Diane Carling

Technical Reviewer: Andrew James Collins

Authorised by:

**Pamela Chadwick**  
**Business Manager**  
**SGS United Kingdom Ltd**

**Verification Statement Date: 12 May 2024**

This Statement is not valid without the full verification scope, objectives, criteria, and conclusion available on pages 2 to 4 of this Statement.



## **Schedule Accompanying Greenhouse Gas Verification Statement Number UK.VOL.INV.0148.2023**

### **Brief Description of Verification Process**

SGS has been contracted by Ciena for the verification of direct and indirect carbon dioxide (CO<sub>2</sub>) equivalent emissions as provided by Ciena, 7035 Ridge Road, Hanover, MD21076 USA in their GHG Assertion in the form of a Greenhouse Gas Emissions Report covering CO<sub>2</sub> equivalent emissions.

### **Statement Of Independence and Competence**

The SGS Group of companies is a world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social, and ethical auditing, and training; environmental, social and sustainability report assurance. SGS United Kingdom Limited affirms its independence from Ciena being free from bias and conflicts of interest with the organisation, its subsidiaries, and stakeholders. The assurance team was assembled based on their knowledge, experience, and qualifications for this assignment and conducted in accordance with the SGS Code of Integrity.

### **Roles and Responsibilities**

The management of Ciena is responsible for the organization's GHG information system, the development and maintenance of records and reporting procedures in accordance with that system, including the calculation and determination of GHG emissions information and the reported GHG emissions.

It is SGS' responsibility to express an independent GHG verification opinion on the emissions as provided in the Ciena GHG Assertion for the period 1<sup>st</sup> November 2022 to 31<sup>st</sup> October 2023. As independent auditors to Ciena our work was conducted based on current best practice in independent verification and in accordance with SGS policies regarding impartiality and independence. SGS has no conflict of interest in relation to providing these services to Ciena.

SGS conducted a third-party verification following the requirements of ISO 14064-3:2019 of the provided CO<sub>2</sub> equivalent assertion during the period March to May 2024.

The verification and assurance methodology employed by SGS was based upon the internationally recognized standard ISO 14064-3:2019 - Specification with guidance for the validation and verification of greenhouse gas assertions. The assurance was comprised of a combination of desk-based documentation review and telephone interviews with relevant employees. The verification was based on the verification scope, objectives and criteria as agreed between Ciena and SGS on 2<sup>nd</sup> February 2024.

### **Level of Assurance**

The level of assurance agreed is a limited level of assurance.

### **Materiality**

The materiality required of the verification was considered by SGS to be 10% based on the needs of the intended user of the GHG assertion. Data and information supporting the CO<sub>2</sub> equivalent assertion were historical in nature and proven by evidence or estimated using the best available data.



### **Scope**

Ciena has commissioned an independent verification by SGS of reported CO<sub>2</sub> equivalent emissions arising from their activities. The objective of the verification assessment is to establish conformance with applicable verification criteria within the scope of the verification, to enable submission of verified emissions data for the CDP. Data and information supporting the CO<sub>2</sub> equivalent assertion was historical in nature and proven by evidence.

This engagement covers verification of emissions from anthropogenic sources of greenhouse gases included within the organization's boundary.

- The organizational boundary was established following the operational control approach.
- Title or description of activities: Manufacturing, research and development, laboratories and office facilities.
- Location/boundary of the activities: Global including; USA, Canada, India, Australia, United Kingdom, Japan, Brazil, Hong Kong, Singapore, Argentina, Germany, South Korea, Saudi Arabia, China, Columbia, France, Indonesia, Israel, Malaysia, Mexico, Netherlands, New Zealand, Philippines, Russia, UAE and Vietnam
- Physical infrastructure, activities, technologies and processes of the organization, offices, laboratories.
- GHG sources, sinks and/or reservoirs included:
  - Scope 1 – stationary combustion, mobile combustion,
  - Scope 2 – purchased electricity.
  - Scope 3 emissions include:
    - Category 1 Purchased Goods and Services
    - Category 3 Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2 (FERA)
    - Category 4 Upstream transportation and distribution
    - Category 5 Waste Generated in Operations
    - Category 6 Business Travel
    - Category 7 Employee Commuting
    - Category 11 Use of sold products.
    - Category 12 End of life treatment of sold products.
- Types of GHGs included: CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, HFCs,
- Directed actions: none.
- GHG information for the following period was verified 1<sup>st</sup> November 2022 to 31<sup>st</sup> October 2023
- Intended user of the verification statement: Internal and external stakeholders.

### **Objective and Criteria**

The purposes of this verification exercise are, by review of objective evidence, to independently review:

- Whether the CO<sub>2</sub> equivalent emissions are as declared by the organization's CO<sub>2</sub> equivalent assertion
- That the data reported are accurate, complete, consistent, transparent, and free of material error or omission.

### **Materiality**

The materiality required of the verification was considered by SGS to be below 10%, based on the needs of the intended user of the GHG Assertion.



## Conclusion

The GHG information for the period 1<sup>st</sup> November 2022 to 31<sup>st</sup> October 2023 disclosing emissions of 2,427,388 metric tonnes of CO<sub>2</sub> equivalent (market based with REC) are verified by SGS to a limited level of assurance, consistent with the agreed verification scope, objectives, and criteria.

Scope	Metric tonnes of CO <sub>2</sub> equivalent	
Scope 1	2,110	
Scope 2	32	(Market based)
Scope 2	14,312	(Location based)
Scope 3	2,425,246	

SGS' approach is risk-based, drawing on an understanding of the risks associated with modelling GHG emission information and the controls in place to mitigate these risks. Our examination included assessment, on a sample basis, of evidence relevant to the voluntary reporting of emission information.

SGS concludes with limited assurance that there is no evidence to suggest that the reported CO<sub>2</sub> equivalent assertion is not materially correct and is not a fair representation of GHG information based on the calculation methodologies utilized.

During the verification process some examples of good practice as well as some opportunities for improvement in underlying processes were identified and reported with the aim of enabling a process of continual improvement in collection and reporting of data.

Ciena continues to improve the quality of data from suppliers, sites and has invested in ESG software to assists the process.

## Opportunities for Improvement

- Some site Scope 1 and 2 data for operations is estimated because of the nature of the operation and access to data, they continue to work with Third parties to improve the data quality.
- The waste data from sites continues to develop, estimates are applied for waste for a number of sites. Evidence from waste contractor records would improve the transparency and the accuracy of the data.
- The staff commute data includes consideration of employees contracted to work from home, but consideration needs to be extended for hybrid working.
- It is recommended that Ciena implement an internal audit process to review all the data, with any corrective actions or improvements noted and addressed before an external audit.

We planned and performed our work to obtain the information, explanations, and evidence that we considered necessary to provide limited level of assurance that the CO<sub>2</sub> equivalent emissions are fairly stated.

This statement shall be interpreted with the CO<sub>2</sub> equivalent assertion of Ciena as a whole.

Note: This Statement is issued, on behalf of Client, by SGS United Kingdom Ltd, Rossmore Business Park, Inward Way, Ellesmere Port, Cheshire, CH65 3EN ("SGS") under its General Conditions for GHG Validation and Verification Services. The findings recorded hereon are based upon an audit performed by SGS. A full copy of this statement and the supporting GHG Assertion may be consulted via Ciena. This Statement does not relieve Client from compliance with any bylaws, federal, national, or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on SGS and SGS shall have no responsibility vis-à-vis parties other than its Client.