

Quarterly Financial Results Briefing Third Quarter of FY2024

QD Laser, Inc. February 2025



Remarks from Osamu Nagao, President & CEO

We are pleased to present the financial results briefing materials for QD Laser, Inc. for the third quarter of the fiscal year ending March 2025 (October to December 2024).

The cumulative results up to the third quarter showed sales of 925 million yen and an operating loss of 333 million yen. These results, supported by the robust performance of the Laser Device business, exceeded the initial plan, achieving year-on-year growth in revenue and profit (i.e., a reduction in losses). This marks a turnaround from the revenue and profit declines seen through the second quarter, and we view this as a solid start toward achieving the medium-term business plan announced in November 2024. Losses continue, however, and we will continue our efforts to ensure their elimination.

Additionally, we have revised our full-year forecast upward to 1,271 million yen in sales and an operating loss of 547 million yen. This revision is primarily due to an exceptional NRE (commissioned development) contract related to smart glasses, while our basic policy in the VID business is not to undertake NRE projects.

In our medium-term business plan, we aim to achieve profitability by the fiscal year ending March 2027 and further to sustain and implement growth potential. To expedite the "aggressive" initiatives necessary for the latter, Mr. Kiyoshi Okubo was appointed as Executive Officer and COO (Chief Operating Officer) in January 2025. Mr. Okubo was one of the founding members of QD Laser and served as Executive Vice President for approximately four years from the company's incorporation. Until the end of last year, he was stationed in Silicon Valley, where he was exposed to cutting-edge technologies and industrial transformation. We expect him to leverage his knowledge and experience to elevate our business to a higher level.

Regarding specific initiatives outlined in the medium-term business plan, we will provide updates as soon as they reach a stage where they can be disclosed. While we recognize the importance of speed, we also believe that premature rush should be avoided. We appreciate your understanding and continued support.

Osamu Nagao President & CEO

Mission

With the power of the semiconductor laser, Expanding the "Can Do" of Humanity.

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What was once thought to be impossible is now a reality; we have become the only company in the world to successfully mass produce Quantum Dot LASERs.

We make the impossible possible, and we also create new "can do" that doesn't yet exist.

Our laser technology will enable dramatic improvements in our ability to process information, support low vision people, eye health check, and enhance vision, continually pushing the boundaries of human possibility.

Company Profile

Spin-off venture from Fujitsu. IPO in February 2021 at TSE Mothers (currently Growth): securities code: 6613

Company Name	QD Laser, Inc.		
Foundation	April 24, 2006		
Fiscal year-ended	March 31		
Representative	Osamu Nagao, President and CEO		
Number of Persons *1	47		
Location	Headquarters: 1-1 Minamiwatarida-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa		
Business	 Semiconductor Laser Device business Commercialization of state-of-the-art semiconductor lasers for communication, processing, and sensors. Laser Retinal Projection business Commercialized the world's first "RETISSA" utilizing laser retinal projection technology Entrustment, joint development and commercialization of prototypes utilizing our technology and know-how 		
Licenses	 Class II Marketing License for Medical Devices Registration of medical equipment manufacturer ISO 9001 EN ISO 13485 		



Osamu Nagao, President & CEO

History of product expansion

Laser Device





Financial Results for FY2024-Q3

Financial Results Highlights for FY2024-Q3 vs FY2023-Q3

()1 Laser Device (LD) business sales increased 23% YOY to 822 million yen, Visual Information Device (VID) business sales decreased 56% YOY to 102 million yen, and company-wide sales increased 2% YOY to 925 million yen.

The LD business increased by 23% due to an increase in DFB lasers and compact visible lasers, but a decrease in high-power lasers and quantum dot lasers.

The VID business, although development contracts increased, equipment sales decreased due to the elimination of RETISSA NEOVIEWER sales in the US and MEOCHECK sales in the same period of the previous year, resulting in a 56% decrease.



Financial Results Highlights for FY2024-Q3 vs FY2023-Q3

O2 Company-wide operating loss improved by 42 million yen (11%) YOY, LD business operating income increased 178% YOY to 143 million yen.

In the LD business, SG&A increased, including personnel costs and recruitment fees due to increased staff, brokerage fees for relocating new locations, and development costs, but the increase in gross profit exceeded the increase in SG&A, resulting in operating income of 143 million yen, an increase of 178% YOY. In the VID business, although SG&A decreased, gross profit decreased significantly due to lower sales and inventory write-downs in the previous quarter, and operating loss worsened by 51 million yen YOY to 268 million yen. As a result, company-wide operating loss improved by 42 million yen YOY to 333 million yen.



03 Ordinary loss improved by 39 million yen (11%) YOY, quarterly net loss improved by 41 million yen (11%) YOY.

Ordinary loss was 326 million yen, a 39 million yen improvement YOY, which was smaller than the improvement in operating income due to the absence of subsidy and other income that occurred in the same period last year.

Quarterly net loss was 328 million yen, an improvement of 41 million yen YOY.



Financial Results Highlights for FY2024-Q3 vs FY2023-Q3

Sales increased and losses decreased compared to the same period last year

Sales increased 23% YOY in the LD business, decreased 56% YOY in the VID business, and increased 2% YOY for the company as a whole. Operating income in the LD business increased 178% YOY to 143 million yen, and in the VID business it decreased by 51 million yen compared to the same period last year. Companywide operating loss improved by 42 million yen (11%) compared to the same period last year.

Performance Summary

Sales	by	Pro	duct	Group
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(Million JPY)	FY2024 Q1-Q3	FY2023 Q1-Q3	YOY		(Million JPY)	FY2024 Q1-Q3	FY2023 Q1-Q3	YOY
Sales	Sales 925	904	+2%		DFB Laser	381	279	+37%
(020		(+20)		Compact Visible Laser	220	135	+63%
(LD) (VID)	822 102	669 235	+23% △56%	7	High-Power Laser	167	170	△2%
Operating Profit		^ 075			Quantum Dot Laser	53	84	∆36%
or Loss ($ riangle$)	$\triangle 333$	$\triangle 375$	+42	+42	LD Total	822	669	+23%
(LD)	143	51	+91		Products	27	160	∆83%
(VID)	△268	△217			NRE	72	61	+18%
Ordinary Loss ($ riangle$)	∆ 326	riangle 366	+39		Health Check Service	2	12	△78%
Net Loss ($ riangle$)	∆328	328	+41	+41	VID Total	102	235	∆56%
					Grand Total	925	904	+2%

Balance Sheet

Total assets decreased by 533 million yen due to a decrease in cash and deposits, total liabilities decreased by 201 million yen due to decreases in accounts payable and other accounts payable, and the equity ratio was 95.1% ($92.1\%^{*1}$ at the end of the previous fiscal year).

(Million JPY)	End of December 2024	End of March 2024	YOY
Current Assets	4,885	5,762	△876
Fixed Assets	727	384	+ 343
Total of Assets	5,612	6,146	△533
Current Liabilities	246	444	△198
Fixed Liabilities	30	34	∆3
Total of Liabilities	276	478	△201
Net Assets	5,335	5,667	∆332
Total Liabilities and Net Assets	5,612	6,146	△533

Balance Sheet



Order Status

As of the end of the 3rd quarter, sales + order backlog (planned sales for the fiscal year) amounted to 1,201 million yen, exceeding sales forecast by 4%.



Net sales for FY2024-Q3 and order backlog as of the end of the FY2024-Q3

DFB Lasers^{*1}: Sales in FY2024-Q3

381 million JPY sales, increased by 37% year over year.

Strong orders for our main products of light sources for micromachining and measurement(sensor system).

Micromachining: 178 million JPY sales (47%^{*2})

Sales increased by 104% YOY due to strong orders for new processing equipment from North America and existing one from China.

- Measurement(Sensor system): 114 million JPY sales (30%^{*2}) Sales increased by 82% YOY due to strong orders of light sources for LiDAR in Europe and for sensors in China and North America.
- Medical equipment: 51 million JPY sales (14%^{*2})

Sales decreased by 13% YOY. Sales of light sources for medical devices in Europe, which have been on the rise, are steady.

Measurement(semiconductor wafer inspection): 32 million JPY sales (8%^{*2})

Sales decreased by 54% YOY although last fiscal year was strong. On the other hand, mass production certification of light sources for inspection equipment for semiconductor wafer processing in Japanese customer is in progress.



DFB lasers Left : for 15 ps pulsed operation Right : for 50 ps pulsed, ns pulsed, and CW operations





Compact Visible Lasers : Sales in FY2024-Q3

220 million JPY sales, increased by 63% year over year.

Orders from our largest customer, which had been sluggish last fiscal year, have returned, and orders have steadily accumulated as forecast.

 Blood/cell analysis(Flow cytometer/cell sorter^{*1}): 165 million JPY Sales (75%^{*2})

Sales increased by 150% YOY.

For China biggest customer (Headquarter in North America), sales of light sources for biomedical equipment increased by 100 million JPY YOY due to end of inventory adjustment.

• Microscope: 51 million JPY sales (23%²)

Sales decreased by 23% YOY.

Sales of light sources for a biomedical STED^{*3} microscope

decreased by 10 million JPY YOY in Europe.

On the other hand, sales of 12.9 million yen due to samples orders for mass production certification of light sources for biomedical equipment in Japan.

Lantana

Samples rental begins in February 2025, and plan to release improved products in June based on feedback.



Compact visible lasers Left: green, Middle: yellow-green, and Right: orange.





High-Power Lasers : Sales in FY2024-Q3

167 million JPY sales, decreased by 2% year over year.

Decreased orders of light sources for sensors, levelers and wafer transfer machines which received many orders last fiscal year.

 Leveler for construction/DIY and sensor: 82 million JPY sales (49%^{*1})

Sales increased by 3% YOY. Sales decreased by 5% YOY due to change in laser wavelength of light sources for sensors and levelers in China which accounted for 25% of this category. However, total sales increased due to orders for light sources of Europe sensor manufacture and other customers.

• Sensor in semiconductor factories: 45 million JPY sales (27%^{*1})

Sales increased by 5% YOY. Sales of light sources for sensors of wafer transfer machines used in semiconductor factories for two companies decreased by 20% YOY due to low orders, which accounted for the majority of sales in this category. However, total sales slightly increased by strong orders for light sources for particle counters, etc.

 Machine vision and data communication in factories: 34 million JPY (21%^{*1})

Sales decreased by 22% YOY. Sales of light sources for machine vision increased by 80% YOY in North America, which accounted for the majority of sales in this category. However, sales from other customers are slow.





High-power lasers TO package

Quantum Dot Lasers^{*1} : Sales in FY2024-Q3

53 million JPY sales, decreased by 36% year over year.

• Various progress in research and development aimed at mass production for final products incorporating quantum dot lasers in our customers.

•Working on quantum-dot lasers for silicon photonics with nine customers in Japan, the US, and Europe for applications of optical connector, chip-to-chip communication and LiDAR etc.

• The demand for quantum dot lasers for research and development among our customers is expected to generally remain in line with the previous trend, although there will be fluctuations in the ups and downs. •Eight universities and research institutes in Japan, North America, Europe and Asia: Inquiries about quantum dot wafers for research. Received five orders and shipment finished by the 3rd quarter of the year. 4 ordered items scheduled to be shipped in the 4th quarter of the year.

Continue to receive orders and ship wafers etc. for optical connectors
 and chip-to-chip and chip-to-chip communication

From a Japanese customer in mass production, 60,000 units were ordered from 2023 to 2024. 42,000 units were already shipped and remaining 18,000 units will be shipped in 4th quarter of FY2024.
 The forecast after 2025 is currently being confirmed.











Quantum dot laser chip

102 million JPY sales, decreased by 56% year over year.

• Product and Service Sales (Cumulative Sales of Q3: 29 million JPY)

Based on the Mid-term Management Plan policy, the business has been consolidated into the following four key areas ①Eye health check services using RETISSA MEOCHECK ②Expansion of sales for the handheld visual support device RETISSA ONHAND ③Development, production, and sales support for newly developed third-party visual assistance products ④Provision of core components and technology

• The head mount display RETISSA Display II has been discontinued. The RETISSA NEOVIEWER, a collaborative product with Sony, has achieved its full-year sales target of JPY 21 million, and additional production is currently on hold.

①RETISSA MEOCHECK – Promoting the adoption of the eye health check service in the transportation and logistics industries.
 ②RETISSA ONHAND – Promoting adoption in public facilities, such as museums and sports venues.

③④Third-party visual assistance products – Progressing negotiations on technology licensing.

•Contract Development (NRE) (Cumulative Sales of Q3: 72 million JPY) Focusing on the development of next-generation laser retinal projection eyewear (smart glasses), orders worth JPY 62 million were received in the third quarter.

• The Mid-term Management Plan initially set a basic policy of not accepting NRE orders; however, an exception was made to accept projects exceeding JPY 70 million in the fourth quarter.

- Joint business development in the fields of smart glasses and vision health medical applications
- $\boldsymbol{\cdot}$ Discussions are ongoing with multiple candidates

QD LASER



Sales of Q3 in FY2022, 2023 and 2024

(Million JPY)	FY2024 Forecast(A)	Previous Forecast(B)	(A)-(B)	FY2023 Actual	YOY
Sales	1,271	1,155	+10%	1,247	+ 2%
			(+116)		(+23)
(LD)	1,102	1,054	+4%	934	+18%
(LEW)	169	100	+69%	312	∆46%
Operating Profit or Loss (\triangle)	∆547	△605	+58	△604	+56
(LD)	107	83	+24	41	+65
(LEW)	∆371	∆405	+34	riangle 375	+3
Ordinary Loss (\triangle)	∆534	△592	+58	△600	+65
Net Loss ($ riangle$)	∆538	△596	+58	△642	+103

In the medium-term management plan announced on November 14, 2024, we stated that we basically would not undertake development contracts in the VID business, but we received an order for a smart glasses-related project as an exception. Additionally, in the LD business, orders for all products exceeded previous forecasts. We have revised our business forecasts mainly for these reasons.

Order Status (After upward revision of sales forecast)

As of the end of the 3rd quarter, sales + order backlog (planned sales for the fiscal year) amounted to 1,201 million yen, which is equivalent to 95% of the revised sales forecast.²



Net sales for FY2024-Q3 and order backlog as of the end of the FY2024-Q3



Business Summary



Two Businesses to Expand Human Capabilities

autonomous

driving through

light sensing

Increasing "abilities" with the power of semiconductor lasers, contributing to the improvement of overall human happiness. *Note: The name has been changed from the Laser Eyewear (LEW)

business due to the expansion of business areas. Visual Information Device (VID)* Laser Device (LD) Business Innovation in Communication, Innovation in Vision Measurement, and Processing Precise Using laser retinal Eve health check using High-speed and measurement in High-speed and projection technology to laser retinal projection can already stable biomedical and high-precision make the difficult-to-see technology communication semiconductor processing visible (Vision Health Care) manufacturing (Low Vision Aid) +╋ Dramatic Safer improvement in More detailed New visual

analysis and

measurement

computing power

through optical

interconnects

Area

What we

"do" now

What we

now on

can do from

The "ultimate"

smart glasses

experiences in

the AR/VR field

Our Major Laser Device Products, Wavelengths, Features, and Uses **Compact visible lasers High power laser DFB** laser Quantum dot laser Produccts 532, 561,594 nm 1030, 1053, 1064, 1080, 1120, 1180nm 640-940nm 1200-1330nm Wavelength 1020-1120nm provided 1nm by 1nm Precise control of wavelength with stable Quantum dots are used for the High power Fabry Perot laser Miniature size, low power operation under continuous, nanosecond, active layer (light-emitting part) consumption, stability, short pulse and picosecond modes. Providing products and solutions of semiconductor lasers. generation, and high-speed • High beam quality, small size, according to applications. Excellent temperature stability, Features modulation, etc. lightweight, high electricity-light Supports various wavelengths, high-temperature resistance, conversion efficiency, and long life World's first current injection small quantities, and custom and low noise performance compared to existing solid-state lasers. yellow-green and orange lasers production. compared to existing · Extensive product lineup that meets the semiconductor lasers. various needs of customers. Measurement Bio. Use Processing Communication Silicon photonics

₩QD LASER

Laser Device (LD) Division: Cases of QD laser product adoption

QD Laser products are integrated into devices that support various industries, contributing to economic activity and the development of various manufacturing industries and businesses that society focuses on.



Expected Role of QD Laser, Inc.

Semiconductor Laser History and Our Position in the 3rd Phase

st phase Proposals of Scientific Principles and Invention of Laser (1960s)

Laser

A technology used in recording, communication, processing and sensing. Applied in various industries such as medicine, home appliances. automobiles, manufacturing and entertainment

2nd phase Invention of Semiconductor Lasers. **Building out Optical Communication** and the Internet (1995~)



A small element with a length of about 1 mm that causes a laser to oscillate by passing a current through a semiconductor. Compared with other lasers. possesses excellent properties such as ultra-small size, highspeed modulation characteristics reaching several 10s of GHz, high power-to-light conversion efficiency (in several 10s of %), and wavelength controllability, etc.

Nanotechnology of QD laser to generate and control laser light

Image of guantum dots taken by an atomic force microscope and a quantum dot laser equipped on fingertip-sized silicon chip as 100Gbps optical transceiver



3rd phase Accelerating the Integration of Humans and Information(2020s~)

Fields where our lasers are applied (being Developed or Commercialized)

- 5G base station
- Supercomputer
- Visual Aid
- Smart Glass

- Optical Interconnect
- Facial recognition
- Fundus photography
- Micromachining
- In-Vehicle communication
- LiDAR for
 - autonomous cars
- Biophotonics
- Visal field testing

Quantum Dot Laser:

A semiconductor laser adopting a quantum dot structure which has a semiconductor nano-sized microcrystal in its active layer Compared with existing semiconductor lasers, these lasers are superior in temperature stability, temperature resistance, and low noise,



Variations on semiconductor lasers developed and sold by QD Laser QD Laser provides a wide range of semiconductor lasers with wavelengths suitable for each application





Our Core Technologies and Competitive Advantages

Material Creation, Design, and Control

Cutting Edge Semiconductor Laser Technology with Several Unique Features





1: "Extremely high temperature (220°C) continuous-wave operation of 1300-nm-range quantum-dot lasers", Published in 2011 Conference on Lasers and Electro-Optics Europe and 12th European 2: Developed the world's smallest 5mm square ultra-high-speed, low-power-consumption optical transceiver—Achieved the world's best, 25Gbps / ch transmission speed—

Visual Information Device (VID) Division: Business Overview

Technology and products that project images directly onto the retina using lasers, bringing innovation to human vision.

World-leading laser retinal projection technology

VISIRIUM TECHNOLOGY®



Three business areas expanding possibilities:





ESG Initiatives



Business Development Directly Linked to Sustainability

Using the power of semiconductor lasers to increase what's possible, contributing to the improvement of well-being for all humanity.



Contributing to medical examinations and research, extending healthy life expectancy through the development of preventive medicine, and realizing an inclusive society.

The expansion of QD LASER's technology and business directly leads to the realization of a happier society.



Terminology



Terminology

Semiconductor laser	A compact device with an approximate length of 1mm that causes laser oscillation by passing an electric current to a semiconductor. In comparison with a solid-state laser or gas laser, more micro-miniature in size; higher speed modulation characteristics up to 10GHz; higher photoelectric conversion efficiency achieving several tens of percent and better controllability of wavelength, among other things. Became widely used in the 1980s as a light source for communication systems and optical recording media, such as CDs and DVDs, etc.
Quantum dot laser (QDL)	A semiconductor laser using a quantum-dot structure comprising nanocrystalline semiconductors in its active layer. QD Laser is the only firm in the world to mass-produce QDLs for optical communications and silicon photonics. In comparison to existing semiconductor lasers, it is superior in temperature stability, high-temperature endurance and low-noise properties.
DFB laser	Distributed Feedback Laser: QD Laser's DFB laser is equipped with a diffraction grating which enables laser oscillation at a single wavelength. It is suitable for applications where the light output needs to be concentrated into a narrow wavelength range, such as the seed light of a fiber laser.
Silicon photonics	A technology which integrates an optical circuit with a silicon electronic circuit that has signal processing and memory functions, thus enabling a breakthrough in the processing capacity limitation of the conventional electronic circuit system (achieving 100 times faster processing speed and lower power consumption) and high-capacity data transmission between LSI chips (10Tb/s).
VISIRIUM technology	A technology that projects images onto the retina using precise optical systems, creating different colors flexibly from the three primary laser light colors - red, green and blue.
Diffraction grating	A technology that freely and precisely controls the wavelength of semiconductor lasers to fit into various applications by forming periodic irregularities inside the laser.
Ultrashort pulse	A laser with a very short pulse width (duration). It is used for microfabrication and other processes as it can prevent shape distortion due to thermal effects.
Compact visible laser	A small module that generates visible light (green, yellow-green, and orange) by combining our unique semiconductor laser and wavelength conversion element.
Retinal projection	To project images onto the retina
Flow cytometer	A device capable of measuring certain properties of cells. By irradiating a cell suspension in a tube with a laser beam, it can measure the number and size of a large volume of cells over a short period of time using fluorescence and scattered light parameters. It is used in various fields including molecular biology, pathology, immunology, plant biology and marine biology.
Lidar	LiDAR (Light Detection and Ranging) is a technology which irradiates an object and uses a light sensor to detect the reflection to measure the distance. It is expected to be used in autonomous driving systems in the future.

Caution When Reviewing This Document

- The materials and information provided in this presentation include forward-looking statements.
- These statements are based on expectations, forecasts and risk assumptions as of this presentation's publishing, and contain uncertainties that could lead to results that are substantially different from these statements.
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