Quarterly Financial Results Briefing
First Quarter of FY2025

QD Laser, Inc.
August 2025

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Remarks from Kiyoshi Okubo, President & CEO

We are pleased to present the financial results briefing materials for QD Laser, Inc. for the first quarter of Fiscal Year 2025 (April to June 2025).

In the first quarter, we recorded net sales of 315 million yen (39% increase year-on-year) and operating profit of -91 million yen (an improvement of 75 million yen compared to the same period last year), marking a strong start with both increased revenue and profit. The significant impact initially feared from U.S. trade policy has not materialized, and we will continue to respond to changes in the economic environment in collaboration with our customers, while steadily promoting sales growth in Laser Device business to achieve our business plan.

Furthermore, we have joined the "100 Billion Yen Declaration" promoted by the Small and Medium Enterprise Agency, and have set forth our medium- to long-term growth vision, “10 by 10 to 100”, aiming to achieve over 10 billion yen in annual sales within the next 10 years. This declaration reflects our commitment to securing the management resources necessary for sustainable growth and to building a solid foundation for expansion. We position capital investment aimed at enhancing production capacity, as well as product development in collaboration with customers, as key drivers of future business scale and sales growth. We will continue to invest with a focus on capital efficiency and develop our organizational structure to realize our growth vision and enhance corporate value.

On the other hand, as announced in June, we have voluntarily initiated a product recall for MEOCHECK following a determination that its results fall under the scope of diagnostic use. Ensuring product quality and safety, as well as compliance with laws and regulations, are fundamental corporate responsibilities. We will reaffirm this awareness across the company and pursue our business operations with the utmost care and diligence.

We sincerely ask for your continued support for QD Laser under its new leadership.

Kiyoshi Okubo
President & CEO

Mission

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

Contents

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

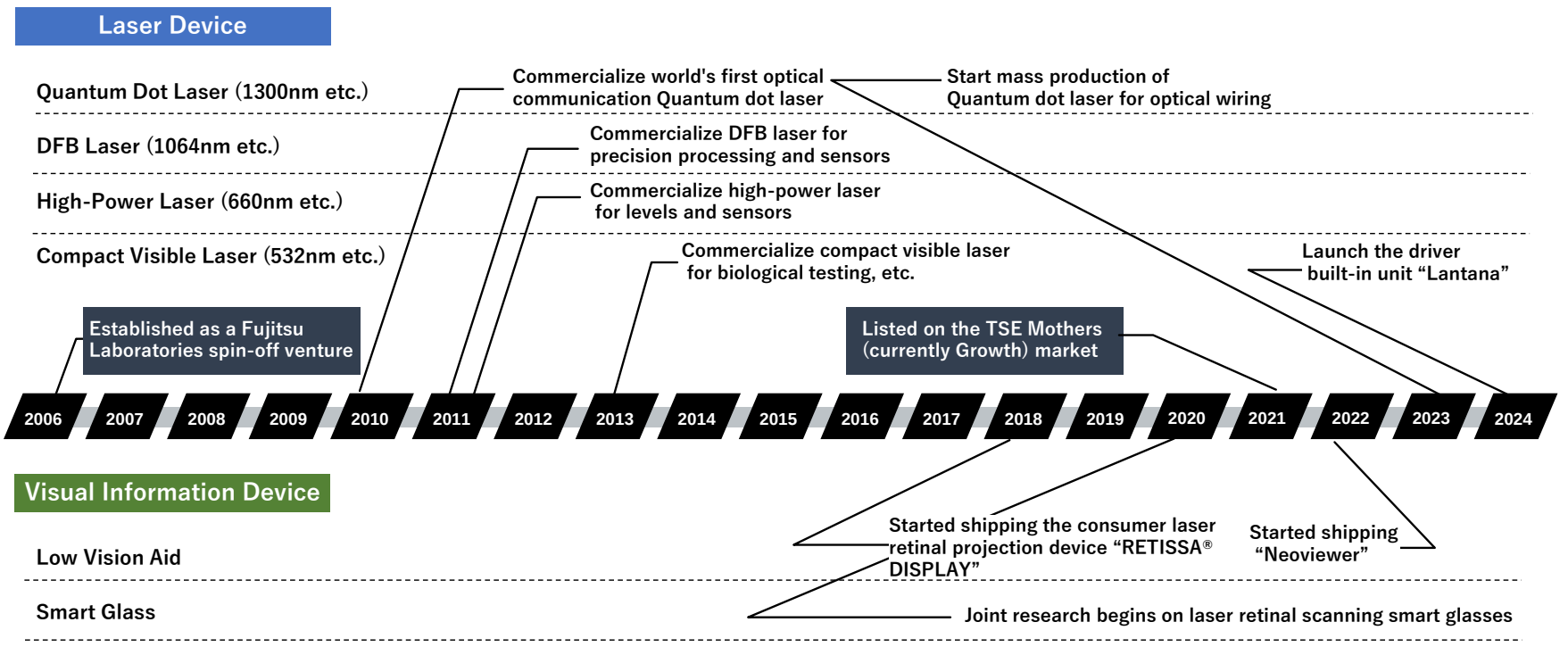
Spin-off venture from Fujitsu.
IPO in February 2021 at TSE Mothers (currently Growth): securities code: 6613

Company Name	QD Laser, Inc.
Foundation	April 24, 2006
Fiscal year-ended	March 31
Representative	Kiyoshi Okubo, 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. ・Visual Information Device business ・Commercialized the world's first "RETISSA" utilizing laser retinal projection technology ・Sales of devices and parts for people with low vision
Licenses	• Class II Marketing License for Medical Devices • Registration of medical equipment manufacturer • ISO 9001

Kiyoshi Okubo, President &CEO

*1: As June 30, 2025. Excluding 10 dispatched employees.

History of product expansion



01

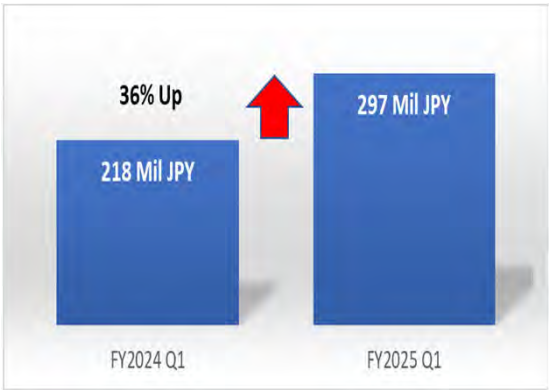
Financial Results for FY2025-Q1

Financial Results Highlights for FY2025-Q1 vs FY2024-Q1

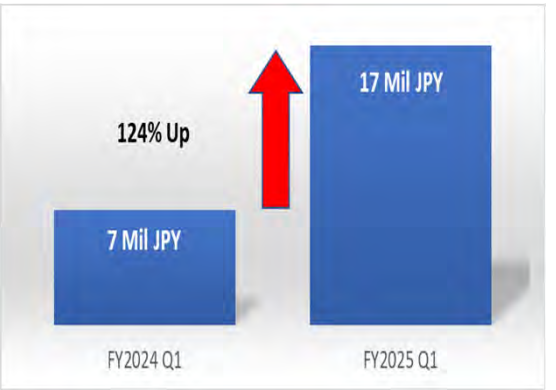
01 **Sales of the Laser Device (LD) business increased by 36% year-on-year to 297 million yen, while sales of the Visual Information Device (VID) business increased by 124% year-on-year to 17 million yen. As a result, total company sales increased by 39% year-on-year to 315 million yen.**

Sales in the LD business increased by 36% overall, driven by growth in DFB lasers, high-power lasers, and quantum dot lasers, despite a decline in compact visible lasers. Sales in the VID business rose by 124% due to an increase in contract development projects.

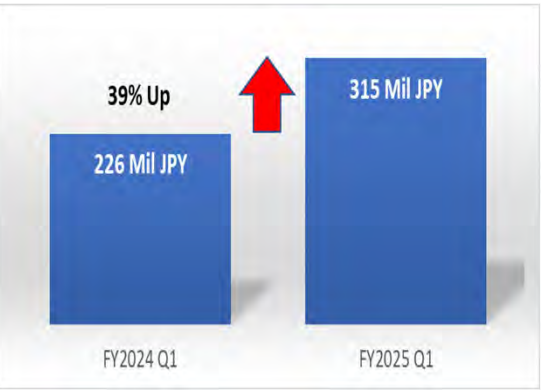
LD sales



VID sales



Company-wide sales



Financial Results Highlights for FY2025-Q1 vs FY2024-Q1

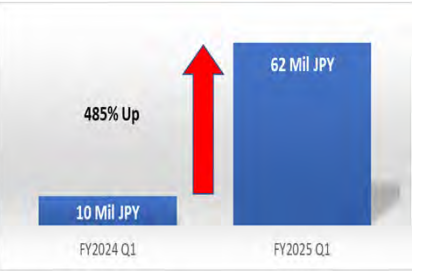
02 The company-wide operating loss improved by 75 million yen (45%) year-on-year. The operating profit of the LD business increased 485% year-on-year to 62 million yen.

In the LD business, operating profit increased 485% year-on-year to 62 million yen, due to an increase in gross profit accompanying increased sales, as well as a decrease in SG&A expenses due to a decrease in commissions, etc.

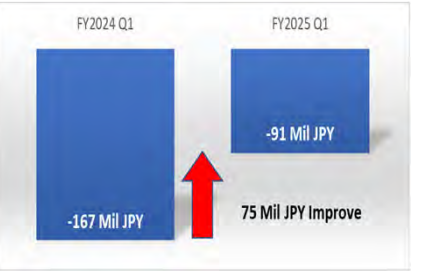
In the VID business, operating loss improved 34 million yen year-on-year to 57 million yen, due to an increase in gross profit accompanying increased sales, as well as a decrease in SG&A expenses due to decreases in labor costs, dispatch costs, development costs, etc.

As a result, the company-wide operating loss improved 75 million yen year-on-year to 91 million yen.

LD operating income



Company-wide operating loss

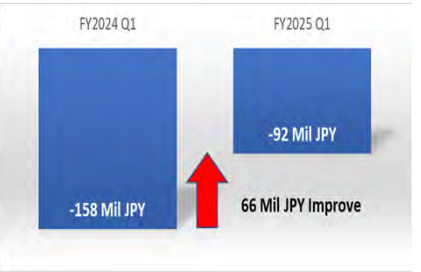


03 Ordinary loss improved by 66 million yen (42%) year-on-year. Quarterly net loss improved by 66 million yen (42%) year-on-year.

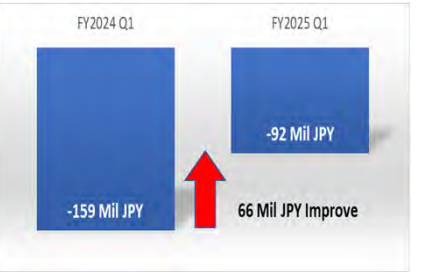
The ordinary loss improved by 66 million yen year-on-year to 92 million yen, which was smaller than the improvement in the operating loss, due to the booking of foreign exchange losses.

The quarterly net loss was equivalent to the ordinary loss, improving by 66 million yen year-on-year to 92 million yen.

Ordinary loss



Quarterly net loss



Financial Results Highlights for FY2025-Q1 vs FY2024-Q1

Sales increased and losses improved year-on-year

Sales increased 36% year-on-year in the LD business, increased 124% year-on-year in the VID business, and increased 39% year-on-year for the entire company. Operating profit increased 485% year-on-year to 62 million yen in the LD business, and the operating loss improved 34 million yen year-on-year in the VID business, resulting in an overall operating loss improvement of 75 million yen (45%) year-on-year.

Performance Summary

(Million JPY)	FY2025 Q1	FY2024 Q1	YOY	FY2025 Forecast *1	Full-Year Progress
Sales	**315**	226	+39% (+89)	1,387	23%
(LD)	**297**	218	+36%	1,247	24%
(VID)	**17**	7	+124%	140	13%
Operating Profit or Loss (△)	**△91**	△167	+75	△445	-
(LD)	**62**	10	+51	66	-
(VID)	**△57**	△92	+34	△197	-
Ordinary Loss (△)	**△92**	△158	+66	△435	-
Net Loss (△)	**△92**	△159	+66	△445	-

Sales by Product Group

(Million JPY)	FY2025 Q1	FY2024 Q1	YOY
DFB Laser	**127**	113	+13%
Compact Visible Laser	**56**	66	△14%
High-Power Laser	**71**	38	+83%
Quantum Dot Laser	**41**	0	-
LD Total	**297**	**218**	**+36%**
Products	**0**	4	△96%
NRE	**17**	0	+1841%
Self Check Service	**0**	2	△100%
VID Total	**17**	**7**	**+124%**
Grand Total	**315**	**226**	**+39%**

*1： Announced on May 14, 2025

Balance Sheet

Total assets decreased by 122 million yen due to a decrease in cash and deposits, etc. Total liabilities decreased by 31 million yen due to a decrease in accounts payable and the transfer of asset retirement obligations from fixed to current, etc. The equity ratio was 95.3% (94.8% at the end of March 2025).

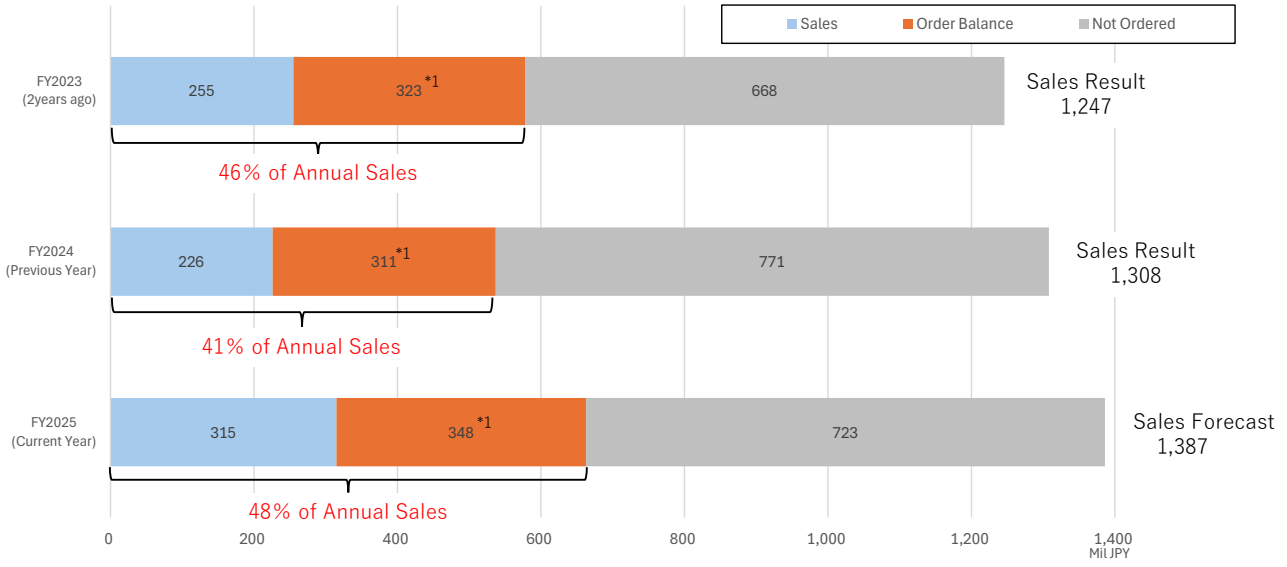
Balance Sheet

(Million JPY)	**End of June 2025**	End of March 2025	YOY
Current Assets	4,447	4,554	△107
Fixed Assets	935	950	△15
Total of Assets	**5,382**	**5,505**	**△122**
Current Liabilities	253	256	△3
Fixed Liabilities	2	30	△28
Total of Liabilities	**255**	**286**	**△31**
Net Assets	**5,127**	**5,219**	**△91**
Total Liabilities and Net Assets	**5,382**	**5,505**	**△122**

Order Status

As of the end of the first quarter, sales and backlog (scheduled sales within the fiscal year) were 48% of the annual sales forecast, a higher progress rate than in the past two years.

Net sales for FY2025-Q1 and order backlog as of the end of the FY2025-Q1



*1 : Expected sales within this fiscal year

DFB Lasers[*1] : Sales in FY2025-Q1

127 million JPY sales, increased by 13% year-on-year.

Orders for light sources for measurement (sensor systems) are booming, despite a decline in demand for precision machining.

- **Micromachining: 57 million JPY sales (21%[*2])**

Sales of lasers for processing equipment in North America were strong, but sales for EV battery processing equipment in China were sluggish, resulting in sales decreased by 44% YOY.

- **Measurement(Sensor system): 57 million JPY sales (46%[*2])**

Sales increased 288% YOY due to strong orders for light sources for sensors in the U.S.

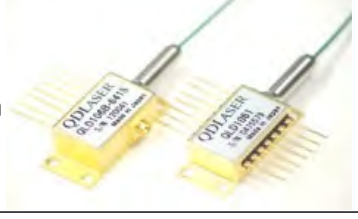
- **Medical equipment: 24 million JPY sales (19%[*2])**

Sales were roughly the same as the same period last year.

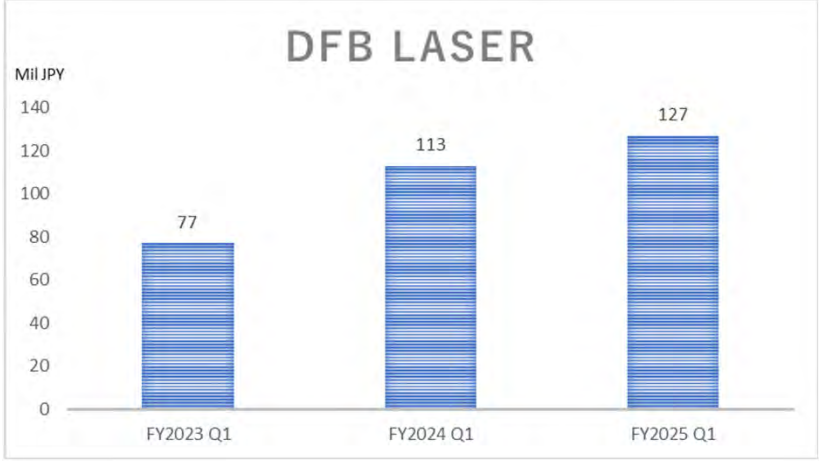
- **Measurement(Semiconductor manufacturing): 14 million JPY sales (11%[*2])**

Major customer is continuing to adjust their inventory. Mass production of light sources for inspection equipment related to semiconductor wafer processes in Japan has begun.

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



Sales of Q1 in FY2023, 2024 and 2025



*1 : Classified for convenience according to application, including some FP lasers, etc.
*2 : Percentage in DFB laser sales.

Compact Visible Lasers：Sales in FY2025-Q1

56 million JPY sales, decreased by 14% year-on-year.

Demand from Chinese customer (headquartered in the U.S.) decreased slightly. The European market for microscope applications was sluggish.

- **Blood/cell analysis(Flow cytometer/cell sorter[*1]): 46 million JPY Sales (82%[*2])**

Sales were roughly the same as the same period last year. Orders from North American customers were strong, but orders from Chinese customer (headquartered in the U.S.) for light sources for bio-testing equipment was slightly down.

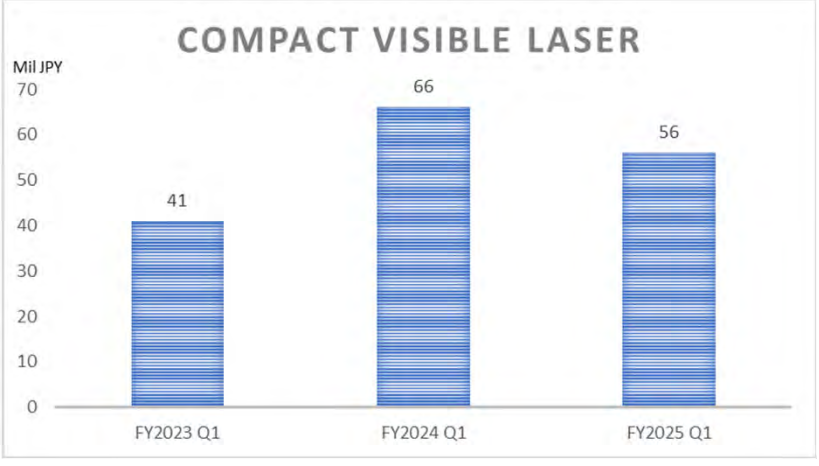
- **Microscope: 8 million JPY sales (16%[*2])**

Sales down 49% YOY. Orders from European biomedical STED microscope manufacturers are strong, but orders from other microscope manufacturers are sluggish.

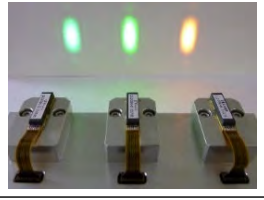
- **Lantana™ [*4]**

Products released in July.

Sales of Q1 in FY2023, 2024 and 2025



Compact visible lasers
Left: green
Middle: yellow-green
Right: orange



Lantana™

*1 : A type of flow cytometer to separate specific cells.
*2 : Percentage in compact visible laser sales.
*3 : STED: STimulated Emission Depletion microscopy. A type of fluorescence microscopy.
*4: All-in-one compact visible laser

High-Power Lasers：Sales in FY2024

71 million JPY sales, increased by 83% year-on-year.

Significant sales increase in all categories.

- **Leveler for construction/DIY and sensor: 17 million JPY sales (25%[*1])**

Sales increased 558% YOY. Sales of lighting sources in China increased significantly.

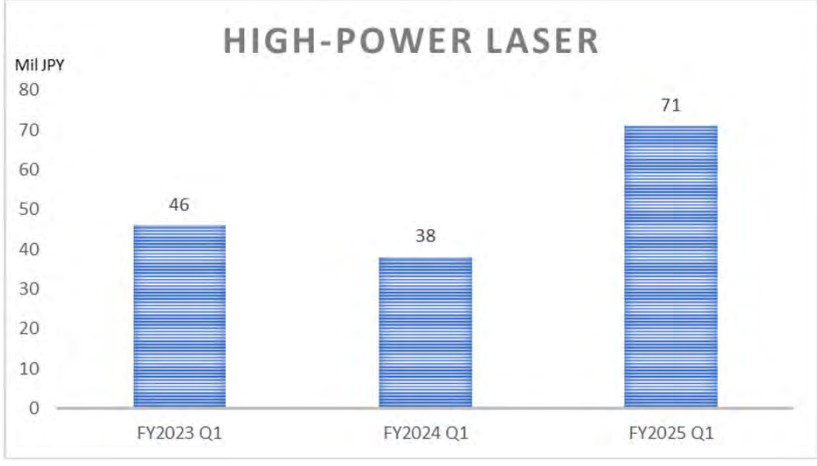
- **Sensor in semiconductor factories: 19 million JPY sales (28%[*1])**

Sales increased 91% YOY. Strong orders for sensor light sources for wafer transfer machines in Japan.

- **Machine vision and data communication in factories: 19 million JPY (27%[*1])**

Sales increased 132% year on year. The start of mass production of light sources for factories in Japan contributed greatly. Demand of light sources for machine vision in North America was stable.

Sales of Q1 in FY2023, 2024 and 2025



High-power lasers
TO package

*1 : Percentage in high-power laser sales.

Quantum Dot Lasers[*1] : Sales in FY2025-Q1

41 million JPY sales, up from zero in the same period last year.

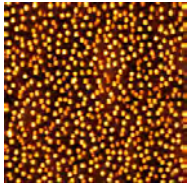
- Various progress in research and development aimed at mass production of quantum dot lasers for incorporation into our customers' final products.

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

- 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 some fluctuations are anticipated.

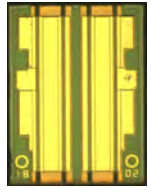
•Shipped quantum dot wafers for optical connector and chip-to-chip communications to industries in the U.S. and Europe.

- Shipment of the remaining 3,200 quantum dot laser chips ordered as mass production projects has been complete after specification changes were made



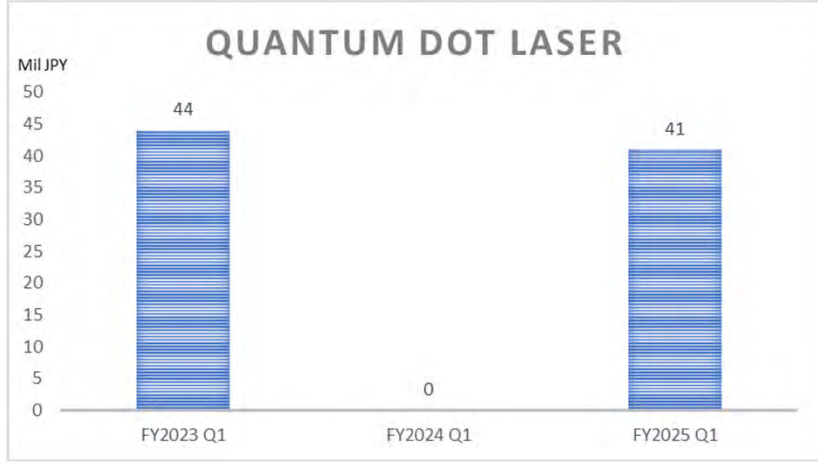
Quantum dot

Quantum dot wafer



Quantum dot laser chip

Sales of Q1 in FY2023, 2024 and 2025



*1 : Classified for convenience according to application; includes some quantum well lasers, etc.

Visual Information Device (VID) : Sales and Progress of the Mid-term Business Plan

17 million JPY sales, increased by 124% year-on-year.

●Product and Service Sales (Annual Cumulative Sales: 0.2 million JPY)

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

・The RETISSA NEOVIEWER, a collaborative product with Sony, was out of stock and stopped sales.

・ MEOCHECK is undergoing a voluntary recall due to a change in software that encourages medical consultation.

①RETISSA ONHAND – Promoting adoption in public facilities, such as museums and sports venues.

②Continued discussions with partners regarding the sales scheme for visual assistance products developed by other companies.

③In detailed discussions with overseas partners regarding technology licensing agreement.

④Started discussions with partners for sales of optical units using lasers and MEMS.

●Contract Development (NRE) (Annual Cumulative Sales: 17 million JPY)

・Focusing on the development of next-generation laser retinal projection eyewear (smart glasses).

・NRE orders continue to be accepted and shipped in 2025.

●Joint business development in the fields of smart glasses and vision health care applications

・Discussions are ongoing with multiple candidates

Sales of Q1 in FY2023, 2024 and 2025

Forecast for the FY2025

Steady growth of the LD business and efforts to restructure the VID business to achieve the mid-term business plan

Laser Device business

Operating profit

consecutive 11 years

Operating profit: 66 million yen
Sales: 1.24 billion yen (11% increase YOY)
Increased costs for new product development and depreciation *1

Expansion of certified mass production

107⇒116products

Expanding customer base for compact visible lasers
Expanding DFB laser applications
New product development and commercialization

Solution product launch*2

The world's smallest
Compact Visible Laser Unit Lantana™ Mass production begins

Visual Information business*3

Sales 140 million yen (-25% YOY)
Operating loss -197 million yen
(114 million yen improve YOY)

Optical unit and component business launch

Expanding the "laser + optical system" developed through retinal projection equipment products to industrial applications and launching a component business

Reorganization of business for the next fiscal year and beyond*4

Strengthening corporate collaboration

Consideration of joint ventures through collaboration with other companies
Technology licensing, sales of other companies' retinal projection devices

*1: Due to the shortening of the useful life associated with the decision to relocate the business unit
*2: Contributing to the enhancement of product competitiveness for customers through miniaturization and improved design flexibility of biomedical equipment
*3: Due to the expansion of the business domain, the name was changed from Laser Eyewear (LEW) Business.
*4: Changed items in line with the policies of the mid-term business plan

Financial Forecast for the FY2025

While the LD business is growing steadily, the VID business is undergoing restructuring with the aim of turning a profit in FY2026, and company-wide sales are expected to increase 6% year-on-year.

(Million JPY)	FY2025 Forecast	FY2024 Actual	YOY
Sales	**1,387**	1,308	+6% (+78)
(LD) (LEW)	**1,247** **140**	1,120 188	+11% △25%
Operating Profit or Loss (△)	**△445**	△445	+0
(LD) (LEW)	**66** **△197**	141 △311	△74 +114
Ordinary Loss (△)	**△435**	△443	+8
Net Loss (△)	**△445**	△445	+0

【LD business】
・Sales will increase 11% year-on-year to 1,247 million yen, thanks to growth in DFB lasers and quantum dot lasers.
・SG＆A expenses are expected to increase 49% year-on-year to 420 million yen due to securing highly skilled personnel, increased depreciation expenses associated with the operation of new facilities and relocation of bases, an increase in development items, and increased facility repair costs.
・Operating profit is expected to decrease 53% year-on-year to 66 million yen due to a deterioration in gross profit margin due to the strong yen and the increase in SG&A expenses mentioned above.
【VID business】
・FY2025 is positioned as a period of business reorganization targeting FY2026, and sales are expected to be down 25% year-on-year to 140 million yen.
・SG&A is expected to be down 21% year-on-year to 262 million yen due to a review of research outsourcing and advertising.
・Operating loss is expected to be 197 million yen, an improvement of 114 million yen year-on-year.
【Company-wide】
・Sales increased 6% year-on-year to 1,387 million yen.
・Operating loss was flat year-on-year at -445 million yen.
・Ordinary loss improved by 8 million yen year-on-year, while net loss was flat year-on-year.

Goals for the FY2026

Laser Device business

Operating profit

consecutive 12 years

Operating profit: 340 million yen (Improve gross profit margin to 45%)
Increase in number of certified products and new customers
Price optimization, reduction in outsourcing costs, and improved yield

Global niche new products:

Sales over 200 million yen

New products in FY2025 will contribute*1
・Compact visible laser "Lantana™"/New wavelength
・DFB laser for semiconductor inspection/precision processing/sensing

Relocation of production base

Establishing a production expansion system

Spring 2026: Relocating to new base in Yokohama.
Increase production capacity by purchasing new equipment and expanding clean rooms and product inspection areas.

Visual Information business

Profitability in FY2026:

Operating profit 0.2 million yen

Aims to achieve profitability in FY2026 by meeting user needs through its low vision aid business, sales of other companies' products, and optical unit and parts business

Expanding optical unit and component business

Aims to expand the component business by applying the "laser + optical system" technology the company has developed for retinal projection device products to industrial applications

Utilizing our own technology and sales know-how

Strengthening corporate collaboration

Expand optical licenses and sales of other companies' retinal projection devices

*1: Due to the shortening of the useful life associated with the decision to relocate the business unit

Vision for New Growth

Our “10 by 10 to 100” vision sets a bold goal of growing our annual sales tenfold to 10 billion yen within 10 years.[*1]

We have joined the "100 Billion Yen Declaration" initiative promoted by the Small and Medium Enterprise Agency and have established a medium- to long-term growth vision aimed at achieving 10 billion yen in annual sales over the next 10 years. With an eye toward utilizing external support programs when necessary, we will work to enhance our corporate value through capital-efficient investments and the development of our organizational structure.

Corporate Philosophy & Management's Message

Expanding Human Possibilities with the Power of Semiconductor Lasers.

With our vision, "Illuminating Human Possibilities," we at QD Laser are committed to taking on new challenges. We hereby declare our “10 by 10 to 100” vision: to grow into a ¥10 billion company by increasing our sales tenfold over the next 10 years.
To achieve this goal, we must accelerate the real-world application of our core quantum dot laser technology and drive innovation in cutting-edge fields, including the silicon photonics market. To meet market expectations, our entire company will work as one to refine our technology and deepen our co-creative partnerships with customers.

Goals and Challenges for Achieving Sales of ¥10 Billion

Goals to Achieve

To achieve sales of ¥10 billion by FY2035, we aim to realize the following.

- Establish and operate a full-scale mass production system for quantum dot lasers.
- In addition to silicon photonics, apply our technology to new, cutting-edge fields.

Challenges

- Ensure steady growth of existing product lines in the Laser Device (LD) business.
- Enhance profitability through the structural transformation of the Visual Information Device (VID) business.
- Continuously secure and optimize production capacity to meet the growing demand.
- Advance the commercialization of customer products that incorporate our technologies, including quantum dot lasers.

Specific Measures to Achieve ¥10 Billion in Sales

Growth Strategies

- To establish a stable supply system for existing product lines and prepare for full-scale mass production, we will continuously expand production capacity through investment in manufacturing facilities.
- We will accelerate product development and improve market fitness through co-creation with customers , including collaboration with key players in cutting-edge fields.

Implementation Framework

- Fully leverage the advanced skills and expertise of our engineers.
- (LD) Pursue co-creative product development with client companies.
- (VID) Pursue joint commercialization in collaboration with other companies.
- Continuously recruit and develop talent.
- Maintain a robust governance structure befitting a publicly listed company.

*1 : Please refer to the announcement titled "Notice of Publication in the '100 Billion Yen Declaration'" released on July 9, 2025 (available in Japanese only).

02

Business Summary

Two Businesses to Expand Human Capabilities

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.

Business	**Laser Device (LD)**	**Visual Information Device (VID)※**
Area	Innovation in Communication, Measurement, and Processing	Innovation in Vision
What we can already "do" now	**High-speed and stable communication** **Precise measurement in biomedical and semiconductor manufacturing** **High-speed and high-precision processing**	**Using laser retinal projection technology to make the difficult-to-see visible (Low Vision Aid)**
What we can do from now on	**Dramatic improvement in computing power through optical interconnects** **Safer autonomous driving through light sensing** **More detailed analysis and measurement**	**"Laser + Optical Components" Utilizing Retinal Projection Technology** **New visual experiences in the AR/VR field** **High-performance smart glasses for AR/VR and medical applications**

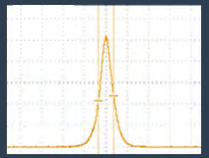
*1: Changed description from "ultimate smart glasses" to specific applications

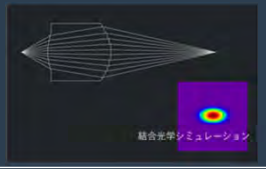
Our Core Technologies and Competitive Advantages

Material Creation, Design, and Control
Cutting Edge Semiconductor Laser Technology with Several Unique Features

Laser Design

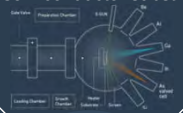
A technology to design lasers suitable for each use.
World's fastest (15ps)*3 semiconductor laser
for precision material processing
utilizing optical communication technology,





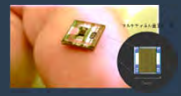
Semiconductor Crystal Growth

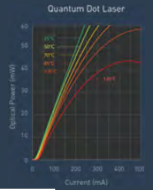
Technology to grow
each atomic layer of semiconductor crystals
on a semiconductor substrate

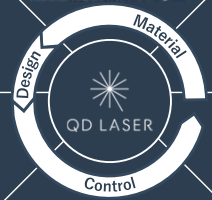


Quantum Dot

Succeeded in the mass production of
quantum dot lasers with world's highest operating temperature *1 and
developed world's smallest silicon-based optical transceiver *2







Small Module

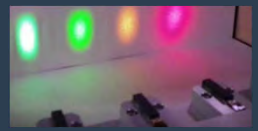
A technology to make DFB lasers ultra compact.
Our yellow/orange laser modules led us
to become one of the finalists at the Prism Awards 2014.

VISIRIUM Technology

A technology to project
images directly on the retina
through ultra small laser projectors.
World's First Commercialization*4

Diffraction Grating

Technology to form periodic refractive index change inside the laser
enabling arbitrary wavelength control.
World's first*5 commercialization of yellow/orange semiconductor laser

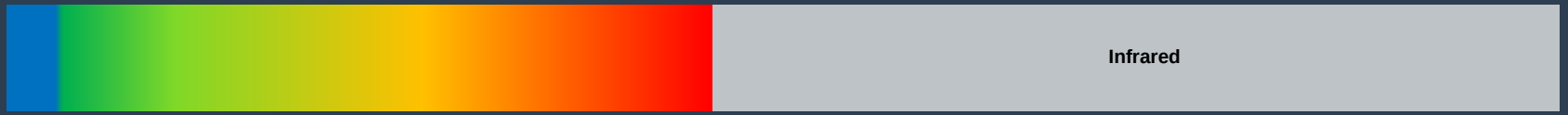


*3: 2017 PRISM Award in Industrial Lasers - QD Laser (2nd Feb 2017)
*4: Prism Awards honour photonic innovations at Photonics West 2019
*5: Japan/U.S. PATENT JP5362301/US8896911

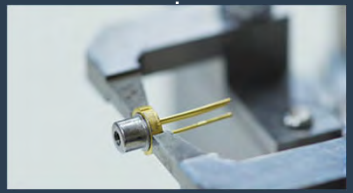
*1: "Extremely high temperature (220°C) continuous-wave operation of 1300-nm-range quantum-dot lasers". Published in 2011 Conference on Lasers and Electro-Optics Europe and 12th European
*2: Developed the world's smallest 5mm square ultra-high-speed, low-power-consumption optical transceiver－Achieved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

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



Compact Visible Laser

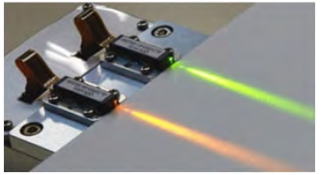
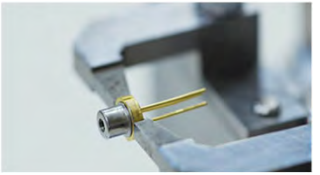


High Power Laser

DFB Laser

Quantum Dot Laser

Our Major Laser Device Products, Wavelengths, Features, and Uses

	Compact visible lasers	High power laser	DFB laser	Quantum dot laser
Produccts				
Wavelength	**532, 561, 594 nm**	**640-940nm**	**1030, 1053, 1064, 1080, 1120, 1180nm** **1020-1120nm provided with 1nm step**	**1100-1330nm**
Features	• Miniature size, low power consumption, stability, short pulse generation, and high-speed modulation, etc. • World's first current injection yellow-green and orange lasers	• High power Fabry Perot laser • Providing products and solutions according to applications. • Supports various wavelengths, small quantities, and custom production.	• Precise control of wavelength with stable operation under continuous, nanosecond, and picosecond modes. • High beam quality, small size, lightweight, high electricity-light conversion efficiency, and long life compared to existing solid-state lasers. • Extensive product lineup that meets the various needs of customers.	• Quantum dots are used for the active layer (light-emitting part) of semiconductor lasers. • Excellent temperature stability, high-temperature resistance, and low noise performance compared to existing semiconductor lasers.
Use	Bio.	Measurement	Measurement Processing	Measurement Communication Silicon photonics

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.

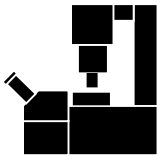
Biomedical

As a light source for inspection and analysis equipment, Contributing to drug discovery and other medical research

Flow cytometer

An analytical device for counting cells. Adopted as its light source.

Light source size 1/3



STED Microscope

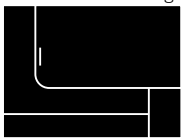
A microscope capable of observing much smaller objects than conventional microscopes.
Adopted as its light source.

Spatial resolution 50nm

Light source size 1/3

Micromachining

Used in the processing of bodies, electronic board, and substrates of precision electronic devices, contributing to miniaturization and higher functionality of the micromachining apparatus.



Ultrashort-pulse laser processing machine

Capable of fine processing with minimal thermal effects. Adopted as its light source

Maintenance frequency 1/3

Surface roughness 1/4

Throughput X 2*1

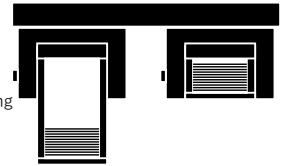
By adopting QD laser products, it becomes possible to create small, high-precision, and high-performance devices

Semiconductor Processing

Incorporated into various manufacturing process equipment, contributing to the entire semiconductor industry

Semiconductor wafer transfer machine

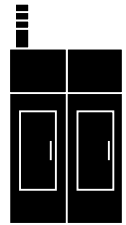
A device for transporting plate-shaped semiconductors. Adopted as a collision prevention sensor



Semiconductor inspection equipment

Inspection equipment to ensure semiconductor quality. Adopted as a sensor to detect abnormalities

Time resolution 15ps



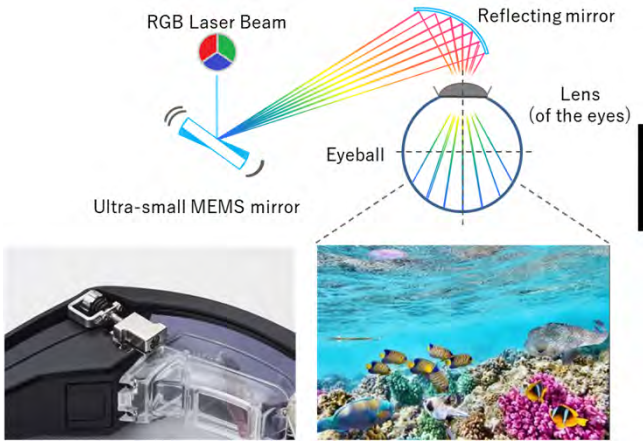
1: Comparison with the same pulse energy. Versus 1064nm nanosecond laser. Our calculation based on Gregory Eberle and Konrad Wegener, Physics Procedia 56 (2014) 951-962.

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:

3. Expanding the visible world
Augmented Vision

Creating the ultimate 'smart glasses' that are indispensable

2. Extending healthy vision lifespan
Vision Health Care

Ability to provide peace of mind to eye disease patients through eye health check services

1. Making the hard-to-see visible
Low Vision Aid

Enabling those with low vision to accomplish tasks

03

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.

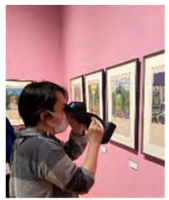
[Laser Device Division]
Advanced Sensing Using Laser Light Sources

- New inspection methods using laser light sources
- Contribution to innovation through data utilization
- Accident reduction in advanced autonomous driving

2024 ——— to ——— 2030

[Visual Information Device Division]
Laser Retinal Projection Technology

- Self-check with MEOCHECK
- Expanding social implementation of low vision aid
- Resolving various inconveniences related to vision



2024 ——— to ——— 2030

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.

04

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.

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- 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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