



Quarterly Financial Results Briefing
Second Quarter of FY2024

QD Laser, Inc.
November 2024

Remarks from Osamu Nagao, President & CEO

I am pleased to present QD Laser, Inc.'s financial results briefing for the second quarter of Fiscal Year 2024 (April to September 2024).

In the first half, sales were 559 million yen and operating loss was 295 million yen, showing a continued decline in sales and profits compared to the same period last year. However, compared to the initial plan, both sales and operating income exceeded the initial plan, as the strong performance of the laser device business offset the struggles of the visual information device business.

Additionally, we have completed the formulation of the mid-term business plan until FY2026, which I have been working on since I became president. Based on the theme of "achieving both profitability and growth potential," we are building on a baseline plan with a high probability of achieving sales of 1,948 million yen and operating profit of 7 million yen in FY2026. We also plan to materialize "offensive" measures to pursue dramatic growth potential. Please refer to the "Mid-Term Business Plan" for details. We will now enter the implementation phase.

Furthermore, due to a change in focus in the visual information device business in the mid-term business plan, we anticipate a decrease in sales. Furthermore, due to the recording of inventory valuation losses at the end of the second quarter, we have revised downward the sales and profit forecasts for this fiscal year. We will do our best to recover as much as possible in the second half.

Based on the unique technology that we have cultivated in both the laser device and visual information device fields, we will work together as a company to meet the expectations of all stakeholders. We appreciate your continued support.

Osamu Nagao
President & CEO

Mission

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

Contents

01 Financial Results for FY2024-Q2

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.

02 Business Summary

03 ESG Initiatives

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

04 Terminology

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 Minamiatarida-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa
Business	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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

Quantum Dot Laser (1300nm etc.)

DFB Laser (1064nm etc.)

High-Power Laser (660nm etc.)

Compact Visible Laser (532nm etc.)

Commercialize world's first optical communication Quantum dot laser

Commercialize DFB laser for precision processing and sensors

Commercialize high-power laser for levels and sensors

Commercialize compact visible laser for biological testing, etc.

Start mass production of Quantum dot laser for optical wiring

Launch the driver built-in unit "Lantana"

Established as a Fujitsu Laboratories spin-off venture

Listed on the TSE Mothers (currently Growth) market

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

Visual Information Device

Low Vision Aid

Vision Health Care

Smart Glass

Started shipping the consumer laser retinal projection device "RETISSA® DISPLAY"

Started shipping "Neoviewer"

Launch eye health check service by "Meocheck"

Joint research begins on laser retinal scanning smart glasses

01

Financial Results for FY2024-Q2

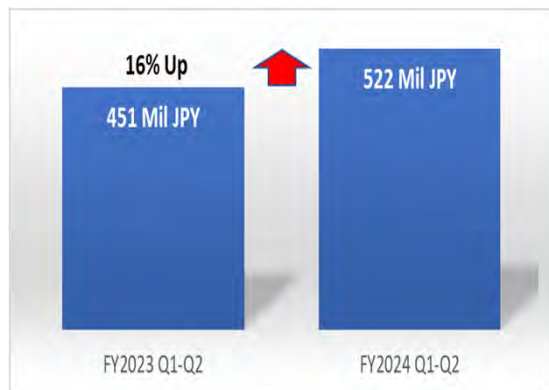
Financial Results Highlights for FY2024-Q2 vs FY2023-Q2

- 01 **Laser Device (LD) business sales increased 16% YOY to 522 million yen, Visual Information Device (VID) business sales decreased 80% YOY to 36 million yen, and company-wide sales decreased 12% YOY to 559 million yen.**

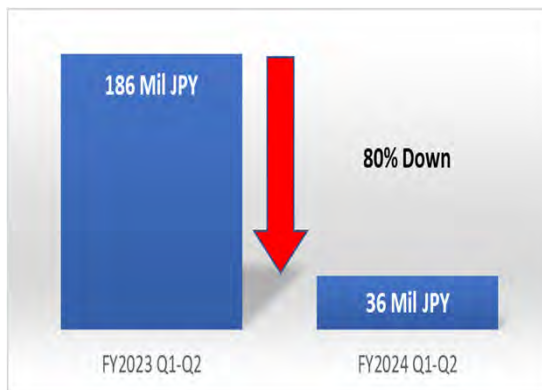
The LD business increased by 16% due to an increase in DFB lasers and compact visible lasers, but a decrease in high-power lasers and quantum dot lasers.

The VID business decreased by 80% due to the elimination of RETISSA NEOVIEWER sales in the US and MEOCHECK sales from the same period of the previous year, as well as delivery times for development contracts mainly in the second half.

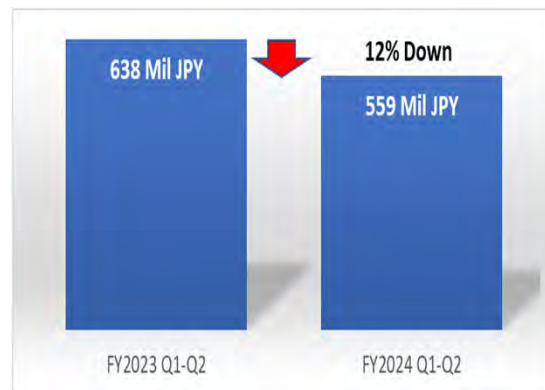
LD sales



VID sales



Company-wide sales



Financial Results Highlights for FY2024-Q2 vs FY2023-Q2

02 Company-wide operating loss worsened by 52 million yen (21%) YOY. LD business operating income increased 57% YOY to 72 million yen, and

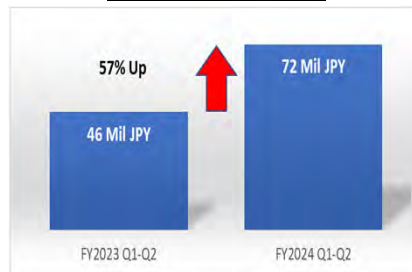
In the LD business, SG&A expenses increased, including personnel costs and recruitment fees due to increased staff, brokerage fees for relocating to a new base, and development costs associated with development progress. However, the increase in SG&A expenses was absorbed by the increase in gross profit associated with the increase in sales. Operating income increased 57% YOY to 72 million yen.

In the VID business, the impact of decreased sales and inventory write-downs was significant, and operating loss worsened by 76 million yen YOY to 223 million yen. As a result, the operating loss for the entire company was 295 million yen, a worsening of 52 million yen YOY.

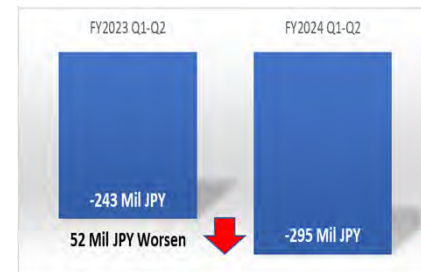
03 Ordinary loss worsened by 54 million yen (22%) YOY, and half year net loss worsened by 53 million yen YOY.

The ordinary loss was due to foreign exchange losses, although there were no expenses related to the exercise of stock acquisition rights that occurred in the same period of the previous year. As a result, operating income deteriorated by 54 million yen YOY, to 302 million yen, which is larger than the deterioration in operating loss. Like the ordinary loss, the half-year net loss worsened by 53 million yen to 303 million yen.

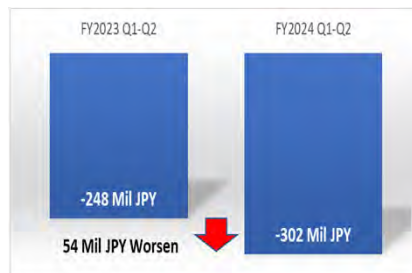
LD operating income



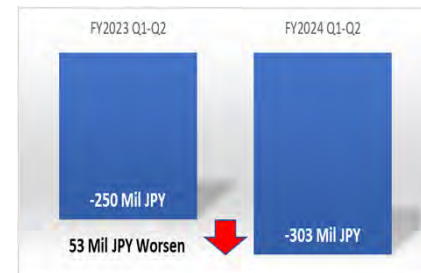
Company-wide operating loss



Ordinary loss



Net loss



Financial Results Highlights for FY2024-Q2 vs FY2023-Q2

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

Sales increased by 16% in the LD business YOY, and decreased by 80% in the VID business YOY, resulting in a 12% decrease in sales for the company. Operating income increased by 57% YOY in the LD business to 72 million yen, and in the VID business it worsened by 76 million yen YOY. Companywide operating loss worsened by 52 million yen (21%) YOY.

Performance Summary

(Million JPY)	FY2024 Q1-Q2	FY2023 Q1-Q2	YOY
Sales	559	638	△12% (△78)
(LD)	522	451	+16%
(VID)	36	186	△80%
Operating Profit or Loss (△)	△295	△243	△52
(LD)	72	46	+26
(VID)	△223	△146	△76
Ordinary Loss (△)	△302	△248	△54
Net Loss (△)	△303	△250	△53



Sales by Product Group

(Million JPY)	FY2024 Q1-Q2	FY2023 Q1-Q2	YOY
DFB Laser	239	180	+32%
Compact Visible Laser	142	79	+80%
High-Power Laser	104	119	△12%
Quantum Dot Laser	36	72	△50%
LD Total	522	451	+16%
Products	23	154	△85%
NRE	10	23	△54%
Health Check Service	2	9	△69%
VID Total	36	186	△80%
Grand Total	559	638	△12%

Balance Sheet

Total assets decreased by 543 million yen due to a decrease in cash and deposits, total liabilities decreased by 234 million yen due to decreases in accounts payable and other accounts payable, and the equity ratio was 95.7% (92.1%^{*1} at the end of the previous fiscal year).

Balance Sheet

(Million JPY)	End of September 2024	End of March 2024	YOY
Current Assets	4,870	5,762	△891
Fixed Assets	732	384	+ 348
Total of Assets	5,602	6,146	△543
Current Liabilities	212	444	△232
Fixed Liabilities	31	34	△2
Total of Liabilities	243	478	△234
Net Assets	5,359	5,667	△308
Total Liabilities and Net Assets	5,602	6,146	△543

Cash Flow

Cash and cash equivalents decreased by 924 million JPY year on year.

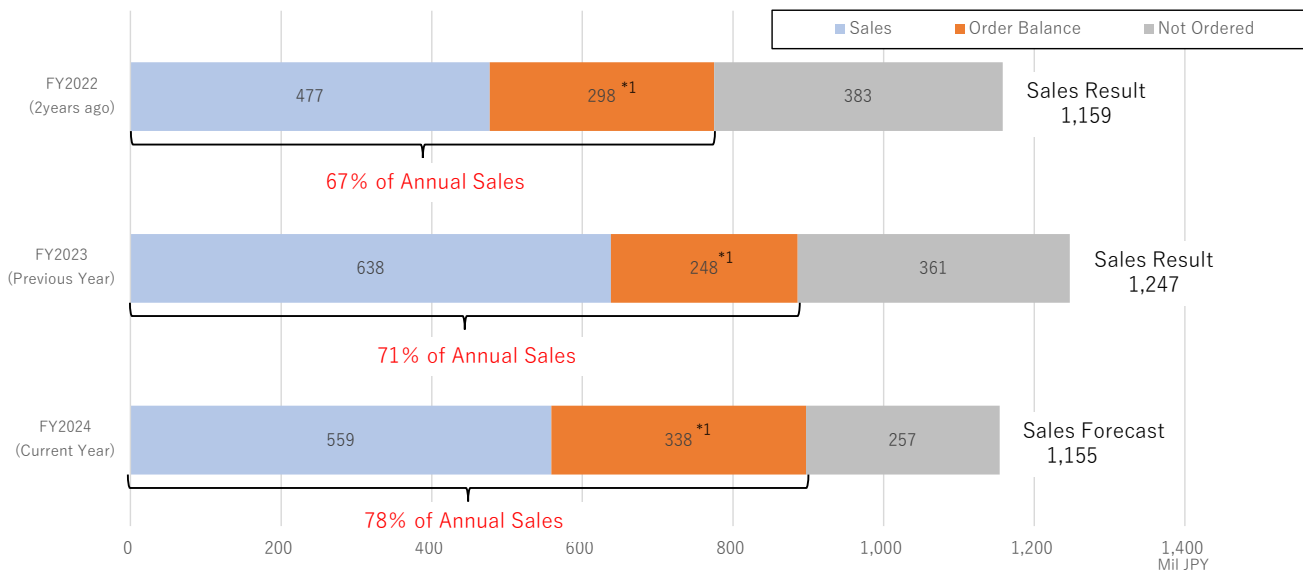
Cash Flow

(Million JPY)	FY2024 Q1-Q2	FY2023 Q1-Q2	YOY
CF from Operating Activities	△325	△254	△71
CF from Investing Activities	△394	△82	△312
CF from Financing Activities	△5	1,789	△1,794
Effect of Exchange Rate Change on Cash and Cash Equivalents	△0	1	△1
Cash and Cash Equivalents Year-end Balance	4,111	5,035	△924

Order Status

As of the end of the second quarter, sales + order backlog (planned sales within the fiscal year) accounted for 78% of expected annual sales.

Net sales for FY2024-Q2 and order backlog as of the end of the FY2024-Q2



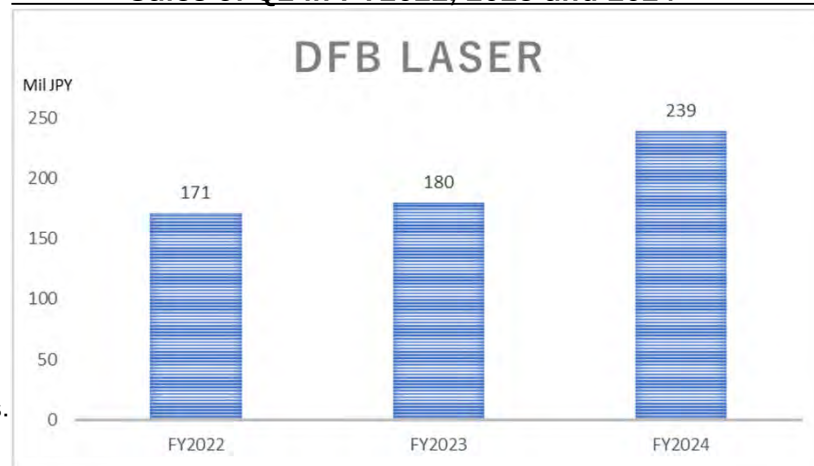
DFB Lasers^{*1} : Sales in FY2024-Q2

239 million JPY sales, increased by 32% YOY.

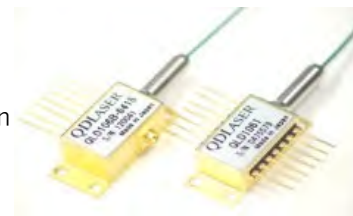
Sales of light sources for semiconductor inspection, which were strong last fiscal year, decreased. However, orders of light sources for processing and sensors increased.

- **Micromachining: 45%**^{*2}
 - North America: Sales of 69,255K yen due to orders of lasers for new processing equipment.
 - China: Sales of lasers for processing equipment increased by 36% YOY.
- **Measurement(Sensor system): 33%**^{*2}
 - Europe: Sales of light sources for LiDAR increased by 106% YOY.
 - China: Sales of 20,928K yen due to orders of light sources for sensors.
 - North America: Sales of 10,242K yen due to orders of light sources for sensors.
- **Medical equipment: 16%**^{*2}
 - Europe: Sales of light sources for medical inspection increased by 17% YOY due to samples orders for mass production certification.
- **Measurement(semiconductor wafer inspection): 6%**^{*2}
 - Europe: Light sources for inspection equipment in the semiconductor wafer process. Expected to receive orders again in the second half of the year due to inventory adjustment.

Sales of Q2 in FY2022, 2023 and 2024



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



Compact Visible Lasers : Sales in FY2024-Q2

142 million JPY sales, increased by 80% YOY.

Resuming orders from our largest Chinese customer, whose orders declined last year due to inventory adjustments.

● **Blood/cell analysis(Flow cytometer/cell sorter)^{*1}: 75%^{*2}**

•China: Sales of light sources for biomedical equipment increased by 224% YOY due to end of inventory adjustment.

•China: Sales of 7,246K yen due to samples orders for mass production certification of light sources for biomedical equipment.

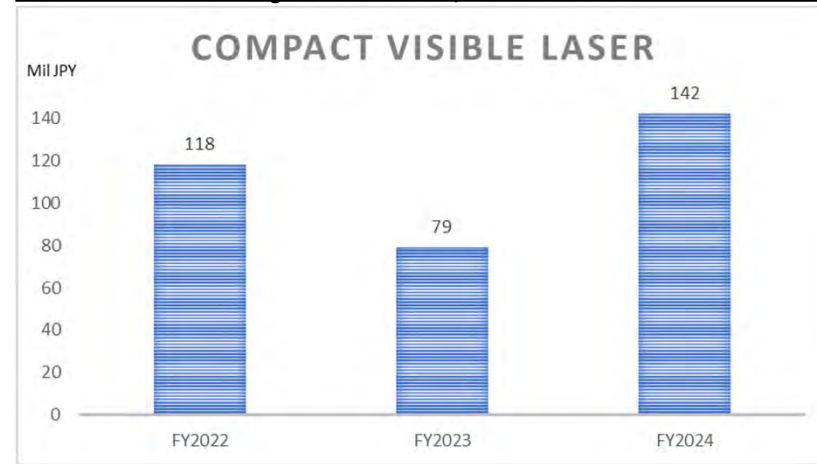
● **Microscope: 23%^{*2}**

•Europe: Sales of light sources for a biomedical STED^{*3} microscope increased by 31% YOY.

•Europe: Sales of light sources for a biomedical microscopes increased by 400% YOY due to completion of inventory adjustment.

•Japan: Sales of 6,424K yen due to samples orders for mass production certification of light sources for biomedical equipment.

Sales of Q2 in FY2022, 2023 and 2024



Compact visible lasers

Left: green,
Middle: yellow-green, and
Right: orange.



High-Power Lasers : Sales in FY2024-Q2

104 million JPY sales, decreased by 12% YOY.

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: 53%^{*1}**
- China: Sales decreased by 31% YOY due to change in laser wavelength of light sources for sensors and levelers.
- North America(Canada): Sales of light sources for sensors increased by 31% YOY.
- **Sensor in semiconductor factories: 25%^{*1}**
- Japan: Sales of light sources for sensors of wafer transfer machines used in semiconductor factories for two companies decreased by 34% YOY due to low orders.
- North America: Sales of 3,382K yen due to orders of light sources for particle counters.
- **Machine vision and data communication in factories: 19%^{*1}**
- North America: Sales of light sources for machine vision increased by 61% YOY.
- Japan: Sales of light sources for machine vision decreased by 29% YOY due to low orders

Sales of Q2 in FY2022, 2023 and 2024



High-power lasers
TO package

Quantum Dot Lasers^{*1} : Sales in FY2024-Q2

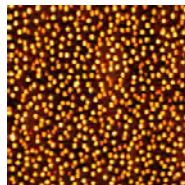
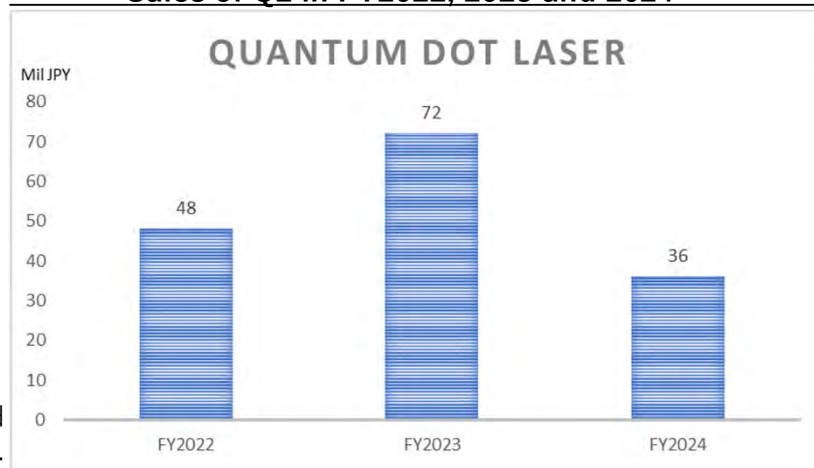
36 million JPY sales, decreased by 50% YOY.

Sales decreased due to two reasons:

- Repeat orders for quantum dot wafer development projects received in the first half of last fiscal year being postponed to the second half,
- Mass production chip shipments postponed to the second half.

- Working on quantum-dot lasers for silicon photonics with nine customers in Japan, the US, and Europe.
- Japan: Shipped chips for optical connector and chip-to-chip communication. Continuing cost-reduction activities. Mass production started in 2023, and 60,000 units were ordered from 2023 to 2024. 18,000 units will be shipped in the second half of 2024. The forecast after 2025 is currently being confirmed.
- North America: Received new order of wafers for optical connector and chip-to-chip communication for shipment in the second half of the year.
- North America: Received repeat order of wafers for optical connector and chip-to-chip communication and shipment finished.
- Five universities and research institutes in Japan, North America and Asia: Inquiries about quantum dot wafers for research. Received three orders and shipment finished in the first half of the year. Received two orders for shipment in the second half of the year

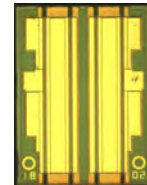
Sales of Q2 in FY2022, 2023 and 2024



Quantum dot



Quantum dot wafer



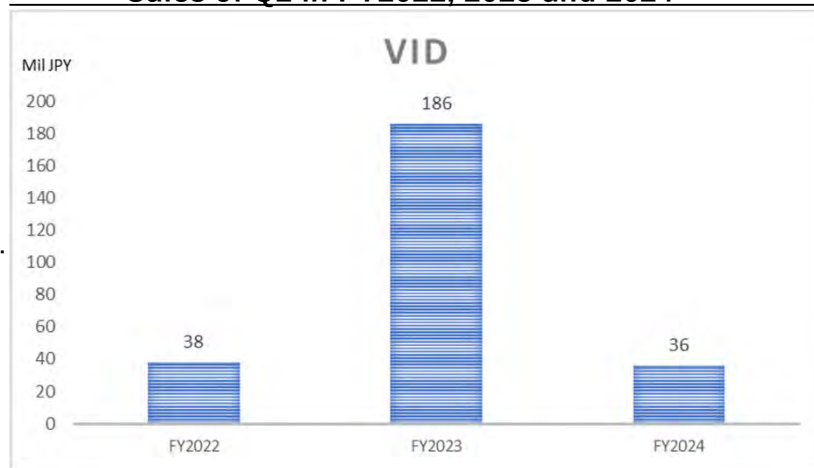
Quantum dot laser chip

Visual Information Device (VID)^{*1} : Sales in FY2024-Q2

36 million JPY sales, decreased by 80% YOY.

- RETISSA MEOCHECK
 - Sold with NIHON GANKA IRYO CENTER as the exclusive distributor. Rental options also available.
 - Promoting the introduction of the "Eye Health Check Service" to the transportation and logistics industries.
- RETISSA NEOVIEWER
 - Sold as a bundle with a digital camera ("DSC-HX99 RNV kit") by Sony.
 - Continued additional domestic shipments following Q1 sales.
- RETISSA ONHAND
 - Distributed mainly for governmental and welfare sectors through the exclusive domestic distributor.
 - Promoting outreach activities in collaboration with public facilities.
- RETISSA Display II + RD2CAM
 - Sales continued through distributors and various e-commerce channels.
- Development
 - Accepting various development orders for next-generation laser retinal projection eyewear (smart glasses).

Sales of Q2 in FY2022, 2023 and 2024



RETISSA ON HAND

RETISSA MEOCHECK

RETISSA NEOVIEWER

Earnings forecast revision and VID inventory valuation loss

(Million JPY)	FY2024 Forecast	FY2023 Actual	YOY	FY2024 ⁺¹ Previous Forecast
Sales	1,155	1,247	△7% (△92)	1,245
(LD)	1,054	934	+13%	1,000
(LEW)	100	312	△68%	244
Operating Profit or Loss (△)	△605	△604	△1	△589
(LD)	83	41	+41	8
(LEW)	△405	△375	△30	△290
Ordinary Loss (△)	△592	△600	+7	△592
Net Loss (△)	△596	△642	+45	△596

In line with our mid-term business plan, we have changed the focus of our VID business, one of our businesses. We have basically decided not to accept orders for development contracts, which we had been considering mainly for smart glasses and vision healthcare. In addition, in the RETISSA MEOCHECK business, which is an eye health check tool, we have decided to focus on expanding sales of eye health check services for the time being. As a result, we have determined that we do not expect to receive orders for product sales during the current period, and have revised our business forecasts as shown in the table on the left.*²

In line with this, in order to more appropriately reflect the fact of the decline in profitability related to inventories in the VID business in our financial position and business results, we have changed the net salable quantity of inventories in the current interim accounting period, and Inventories other than those listed above were written down.

As a result, gross profit for the current interim period decreased by 54,331 thousand yen, and operating loss, ordinary loss, and net loss before taxes each increased by the same amount by 54,331 thousand yen.

On the other hand, the laser device business, centered on DFB lasers and compact visible lasers, is performing steadily at a pace that exceeds previous forecasts.

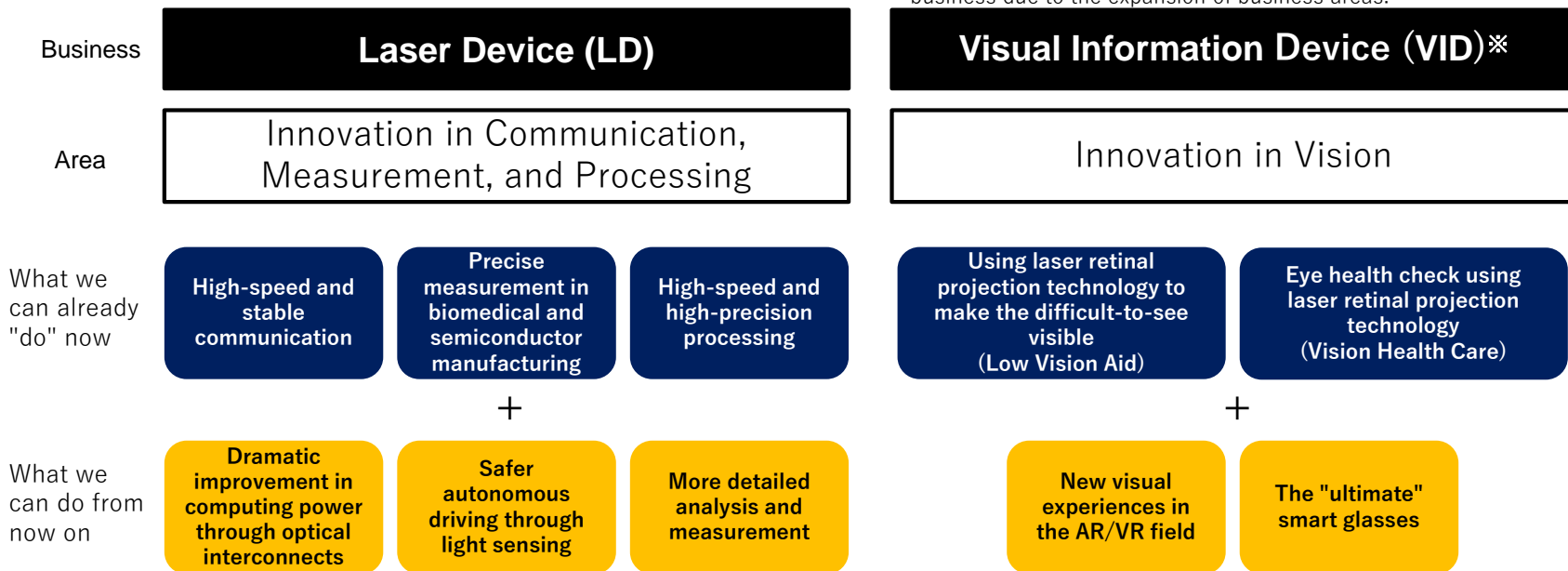
02

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.



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

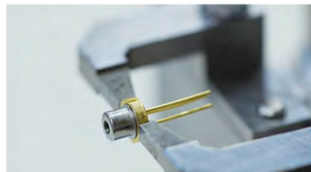
Compact visible lasers

High power laser

DFB laser

Quantum dot laser

Products



Wavelength

532, 561, 594 nm

640-940nm

1030, 1053, 1064, 1080, 1120, 1180nm

1200-1330nm

1020-1120nm provided 1nm by 1nm

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

Measurement

Bio.

Processing

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.

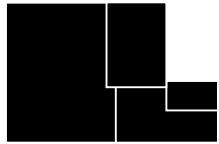
Biomedical

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

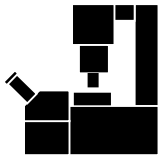
1

3

STED Microscope

A microscope capable of observing much smaller objects than conventional microscopes.

Adopted as its light source.



Spatial resolution

50nm

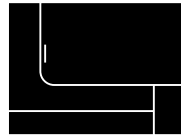
Light source size

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

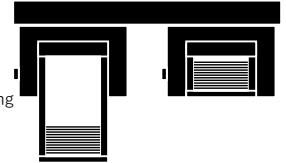
Semiconductor Processing

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



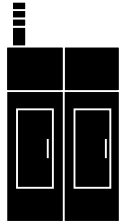
Semiconductor wafer transfer machine

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

Expected Role of QD Laser, Inc.

Semiconductor Laser History and Our Position in the 3rd Phase

1st 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

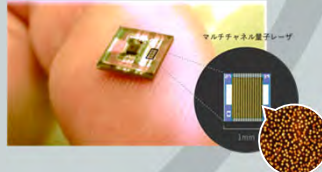
Invention of Semiconductor Lasers, Building out Optical Communication and the Internet (1995~)

3rd phase

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

Nanotechnology of QD laser to generate and control laser light


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



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.

Semiconductor lasers and packaging



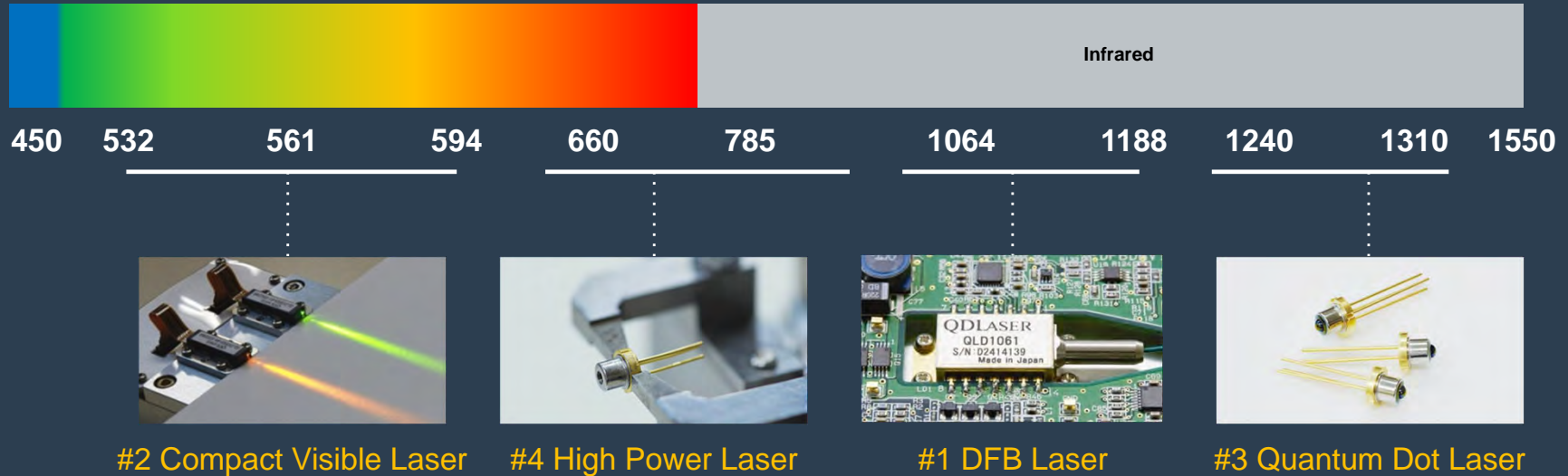
Semiconductor laser: A small element with a length of about 1 mm that causes a laser to oscillate by passing a current through a semiconductor. Compared with other lasers, possesses excellent properties such as ultra-small size, high-speed modulation characteristics reaching several 10s of GHz, high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

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
- Visual field testing

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



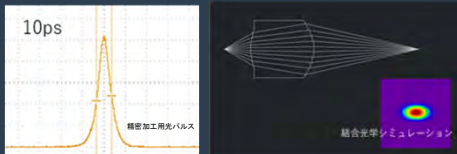
Our Core Technologies and Competitive Advantages

Material Creation, Design, and Control

Cutting Edge Semiconductor Laser Technology with Several Unique Features

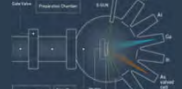
Laser Design

A technology to design lasers suitable for each use.
World's fastest (10ps)^{*3} semiconductor laser for precision material processing utilizing optical communication technology,



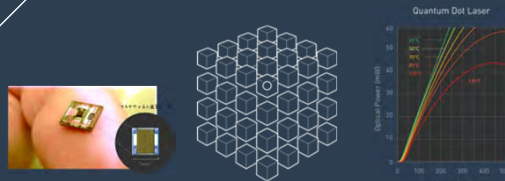
Semiconductor Crystal Growth

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}



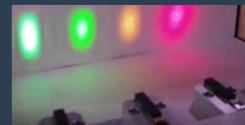
Small Module

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.



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



VISIRIUM Technology

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



*3:
*4:
*5:

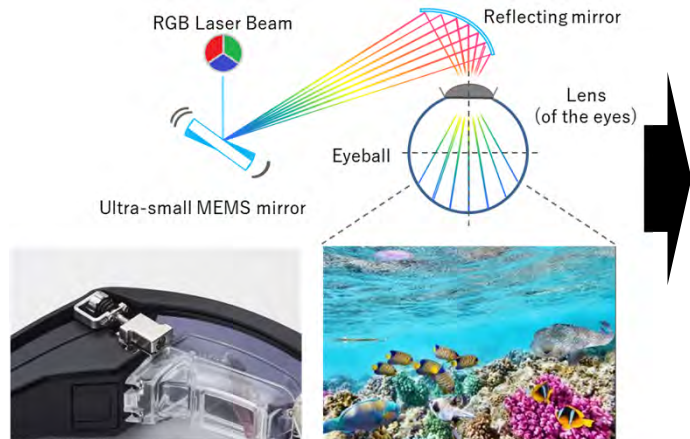
2017 PRISM Award in Industrial Lasers - QD Laser (2nd Feb 2017)
Prism Awards honour photonic innovations at Photonics West 2019
Japan/U.S. PATENT JPS362301/US896911

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

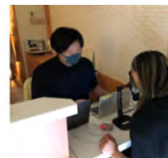
Creating the ultimate 'smart glasses' that are indispensable

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

Early detection of eye diseases using 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.

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.
- These risks and uncertainties are present in any transaction, and are applicable to general industry and market conditions as well as general domestic and international economic conditions, including fluctuations in interest rates and currency exchange rates.
- Note that QD Laser does not bear any duty to update or revise forward-looking statements provided in this document, even if new information comes to light or future events occur.