

STATEMENT OF MATURITY



Client Name: Lolaark Vision Inc.

Date Issued: March 27, 2023

Certificate Number: T2385780

TECHNOLOGY QUALIFIED

This is to certify that

LOLAARK VISION REAL-TIME VIDEO CLARIFIER

has been reviewed in accordance with the ABS *Guidance Notes on Qualifying New Technologies* [1], ABS *Guidance Notes on the Use of Remote Inspection Technologies* [2], and ABS *Guide for Smart Functions for Marine Vessels and Offshore Units* [3]. The technology is validated through demonstration as being able to perform within the established performance requirements for a defined period of time in accordance with the defined performance requirements as outlined in the reference document [4]. The “Technology Qualified” maturity corresponds to a Technology Readiness Level (TRL) of 4 as defined in [6]. The technology may now proceed to the **System Integration Stage**.

Description and Application: The Lolaark Vision Real-Time Video Clarifier software tool (“prototype”) is an advanced mathematical algorithm to enhance the quality of real-time video streams and video recordings to assist in underwater inspection activities. It supports remote inspection activities under low visibility underwater conditions conducted by an experienced team of inspectors, human diver(s), and, in potential future applications, Remotely Operated Vehicles (ROVs).

Boundaries: The NTQ Prototype Validation review is limited to the functionality and capability of the software tool. Any hardware, including the HD-SDI video camera, underwater camera lights, underwater cables, signal converters, and supporting computer operating systems, are outside the scope. Further, assessment of the software development standards, software quality and cybersecurity-related vulnerabilities are outside the scope of this NTQ review.

Scope of Review: Refer to the ABS Technology Qualification Review Letter [5] for the scope of review.

Comments/Notes: Refer to the ABS Technology Qualification Review Letter [5] for comments and notes.

Reference Documents:

[1] ABS *Guidance Notes on Qualifying New Technologies*, 2017

[2] ABS *Guidance Notes on the Use of Remote Inspection Technologies*, 2022

[3] ABS *Guide for Smart Functions for Marine Vessels and Offshore Units*, 2022

[4] Lolaark Vision System Requirements & Description Document – Submittal2

[5] ABS Technology Qualification Review Letter for Prototype Validation

[6] API RP 17Q, Recommended Practices on Subsea Equipment Qualification

ABS shall in no event be held liable for any identified/unidentified hazardous scenarios or qualification activities associated with this technology.

Approved By:

Sharat Valluri
Director, ABS Corporate Technology