

September 7, 2018

Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134 USA

To Whom It May Concern:

Gossamer Security Solutions, Inc. (hereinafter referred to as the "Gossamer") completed its conformance review of the **Cisco FX-OS on 4K/9K Cryptographic Module** with the Cisco FX-OS firmware version **2.3.1** (the "Product") on September 06, 2018; and has found that the Product faithfully integrates the following FIPS 140-2 approved cryptographic module:

1. Cisco FIPS Object Module v6.0 (FIPS 140-2 Cert. #2505)

Specifically, Gossamer's review confirmed that:

- 1. All cryptographic algorithms used for SSHv2 are offloaded to the above Cisco FIPS Object Module.
- 2. All cryptographic algorithms used for HTTPS/TLS are offloaded to the above Cisco FIPS Object Module implementation.
- 3. The cryptographic module will not operate if the above Cisco FIPS Object Module is not present or altered.

It is important to note that several of the above services support algorithms/key lengths that are no longer allowed by NIST Special Publication 800-131A. Using these non-approved key lengths will result in nonconformance to FIPS.

Details of Gossamer's review, which consisted of source code review and operational testing, are obtainable by special request.

Please note that for this review, Gossamer only examined the Product features referenced above and while the Product may contain other features or functionality, Gossamer did not examine these during its review and makes no claims or representations regarding them. Furthermore, the Cryptographic Module Validation Program (CMVP) has not independently reviewed Gossamer' analysis, testing, or results.

The intention of this letter is to provide independent opinion that the Product correctly integrates and uses validated cryptographic modules within the scope of claims indicated above. Gossamer offers no warranties or guarantees with respect to the above described compliance review. This letter does not imply a Gossamer certification or product endorsement.

Please let us know if you have any questions.

Sincerely,

Edward D. Morris Laboratory Director