

August 18, 2017

Whom It May Concern:

Acumen Security verified that the following product faithfully embeds a FIPS 140-2 validated cryptographic module,

- Cisco IOS-XE 3.8.1

The software version is known to operate on the following hardware platform(s):

- Cat 4500E Series w/Sup8LE
 - 4503-E
 - 4506-E
 - 4507R+E
 - 4510R+E

During the review, Acumen Security confirmed that the following cryptographic module is properly incorporated into the product:

- IOS Common Cryptographic Module (IC2M) Rel5 – Cert #2388

As part of the review, the software was tested on the following platforms:

- 4506-E w/Sup 8LE

Acumen Security confirmed that the following features leverage the embedded cryptographic module to provide cryptographic services for **IKE/IPsec, SNMPv3, 802.1x, SSH and TLS.**

- Session establishment supporting each service,
- All underlying cryptographic algorithms supporting each services' key derivation functions,
- Hashing for each service.
- Symmetric encryption for each service.

Additionally, Acumen security confirmed that the following features leverage the embedded cryptographic module to provide cryptographic services for **Radius and TACACS.**

Details of the verification may be obtained from Cisco Systems, Inc. at the request of interested parties. This letter represents the independent opinions of Acumen Security and does not imply endorsement of the product by the CMVP or any other parties.

Sincerely,



Ashit Vora
Laboratory Director