FCC 6SD

Geolocation General Description

for

TP-Link EAP772 2.0

Corporation：TP-LINK CORPORATION PTE. LTD.

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TP-Link PIA inquiry re Use of

Skyhook Wi-Fi positioning Geolocation for 6GHz Access Points

Geolocation General Description

This is a General Description of the Access Point Product "TP-Link EAP772 2.0" (the "Product") of TP-LINK CORPORATION PTE. LTD. ("TP-Link") to determine geographic coordinates and location uncertainty, with a confidence level of 95% per the requirements in 47 CFR Part. E 15.407(k)(9), for 6GHz Standard Power and Automated Frequency Coordination (AFC) support. The FCCID of the "Product" is 2BCGWEAP772V2.

Catalogue

Abbreviations and acronyms

Definition	Acronyms
Automated Frequency Coordination	AFC
Access Point	AP
Federal Communications Commission	FCC
Low Power Indoor	LPI
Standard Power	SP
Standard Power Access Point (6 GHz)	6SD
Basic Service Set	BSS
Media Access Control	MAC
Service Set Identifier	SSID

1. Overview of device geo-location technology

The "Product" uses an AFC geolocation solution to automatically determine the product's geographic location. This solution consists of three interoperable systems as described: (1) The "Access Point", including hardware and software that can perform basic wireless communication which compliant with IEEE802.11 specification. (2) The "AFC Software", a software package that would run on the access points to perform AFC related actions like geo-location information acquisition and AFC available spectrum inquiry. (3) The "Positioning Server", a remote cloud-based server which provides a hybrid geo-location service in the United States. (4) The "Building Elevation Server", a remote cloud-based server which provides a lookup service on the height of buildings distributed in the United States.

The process of determining the geo-location of the "Product" is as described: The "Product" consists of two components, the 6GHz "Access Point"(Hardware & Software) and the "AFC Software", the "Access Point" will work at LPI mode after each restart; when the user enabled the "AFC function", the "AFC Software" will start up and do a Wi-Fi scanning to gather the uniquely identities of the surrounding BSSs, including MAC Address, SSID, and signal strength. The data will be sent to the "Positioning Server" and the "Building Elevation Server" and the 95% confidence level geo-location is got from by accessing the cloud-based database. The "Product" uses the geo-location to perform an AFC spectrum inquiry to an FCC approved AFC server and switch the "Access Point" to SP mode according to the AFC response message.