

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

WK2XBX

(Call Sign)

XD FX MO

(Class of Station)

0166-EX-CN-2019

(File Number)

NAME Cisco Systems

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(j) of the Commission's Rules

Station Locations

- (1) RTP Durham, NC - NL 35-51-38; WL 78-52-53; MOBILE: Area around Cisco Campus, within 1 km, centered around NL 35-51-38; WL 78-52-53

Frequency Information

RTP Durham, NC - NL 35-51-38; WL 78-52-53; MOBILE: Area around Cisco Campus, within 1 km, centered around NL 35-51-38; WL 78-52-53

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3550-3700 MHz	MO	20M0W7D 20M0G7D	1 W (ERP)	
24.25-25.25 GHz	FX	100MG7W 100MG7W	1000 W (ERP)	
27.5-28.35 GHz	FX	100MG7W	1000 W (ERP)	

This authorization effective April 03, 2019 and
will expire 3:00 A.M. EST October 01, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

RTP Durham, NC - NL 35-51-38; WL 78-52-53; MOBILE: Area around Cisco Campus, within 1 km, centered around NL 35-5:

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
37-40 GHz	FX	100MG7W	1000 W (ERP)	

Special Conditions:

- (1) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) Maintain operation separation from the grandfathered earth stations as defined in Part 90, Sub-part Z, or coordinate an agreement with the grandfathered earth station licensees prior to operation in 3550-3700 MHz band.
- (5) Consult the ULS database to ensure that the operation will not cause harmful interference to any existing registered stations in the 3650-3700 MHz band, and notify the registered users in the proposed geographic areas.
- (6) Prior to the start of operations in the 3550 -3700 MHz band, Cisco Systems, must notify by email all the earth stations within 15 km of CBRS small cell transmitters. This notice must include the name and contact information of the stop buzzer personnel in case of interference. The notification should also include the testing parameters and the day and times of each test. Consult MyIBFS database to identify all existing registered earth stations in band (3550-3700 MHz) and adjacent band (3700-4200 MHz).
- (7) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (8) Licensee must avoid pointing the transmitting antenna main beam gain within 10 degrees of any point on the geostationary orbital arc while transmitting signals in the 27.5-28.5 GHz and 37-40 GHz bands.
- (9) Licensee shall ensure that the transmitting fixed station antenna main beam gain tip down when possible and avoid pointing above the horizon to protect satellite stations.
- (10) The authorized station must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.
- (11) Coordinate with the Fixed Microwave Service licensees in accordance with 47 CFR. Part 101.103(d) prior to commencing the test operations.
- (12) The stop buzzer point of contact is Robert Crowe at (919) 323-9972.