

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

EXPERIMENTAL

(Nature of Service)

WJ2XCP

(Call Sign)

XT FX MO

(Class of Station)

0398-EX-CN-2017

(File Number)

NAME Nokia

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(a & j) of the Commission's Rules

Station Locations

- (1) Kalamazoo (KALAMAZOO), MI - NL 42-15-17; WL 85-32-17; MOBILE:within 2 km, centered around NL 42-15-17; WL 85-32-17
- (2) Kalamazoo (KALAMAZOO), MI - NL 42-18-12; WL 85-36-27; MOBILE:within 2 km, centered around NL 42-18-12; WL 85-36-27
- (3) Kalamazoo (KALAMAZOO), MI - NL 42-16-58; WL 85-33-22; MOBILE:within 2 km, centered around NL 42-16-58; WL 85-33-22
- (4) Kalamazoo (KALAMAZOO), MI - NL 42-17-13; WL 85-34-57; MOBILE:within 2 km, centered around NL 42-17-13; WL 85-34-57
- (5) Kalamazoo (KALAMAZOO), MI - NL 42-16-21; WL 85-35-28; MOBILE:within 2 km, centered around NL 42-16-21; WL 85-35-28
- (6) Kalamazoo (KALAMAZOO), MI - NL 42-17-19; WL 85-35-04; MOBILE:within 2 km, centered around NL 42-17-19; WL 85-35-04

Frequency Information

Kalamazoo (KALAMAZOO), MI - NL 42-15-17; WL 85-32-17; MOBILE:within 2 km, centered around NL 42-15-17; WL 85-32-1

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	850MW7W	581 W (ERP)	

This authorization effective September 14, 2017 and
will expire 3:00 A.M. EST September 01, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Kalamazoo (KALAMAZOO), MI - NL 42-15-17; WL 85-32-17; MOBILE:within 2 km, centered around NL 42-15-17; WL 85-32-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	MO	850MW7W	4 W (ERP)	

Kalamazoo (KALAMAZOO), MI - NL 42-18-12; WL 85-36-27; MOBILE:within 2 km, centered around NL 42-18-12; WL 85-36-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	850MW7W	581 W (ERP)	
27.5-28.35 GHz	MO	850MW7W	4 W (ERP)	

Kalamazoo (KALAMAZOO), MI - NL 42-16-58; WL 85-33-22; MOBILE:within 2 km, centered around NL 42-16-58; WL 85-33-22

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	850MW7W	581 W (ERP)	
27.5-28.35 GHz	MO	850MW7W	4 W (ERP)	

Kalamazoo (KALAMAZOO), MI - NL 42-17-13; WL 85-34-57; MOBILE:within 2 km, centered around NL 42-17-13; WL 85-34-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	MO	850MW7W	4 W (ERP)	

Frequency Information

Kalamazoo (KALAMAZOO), MI - NL 42-17-13; WL 85-34-57; MOBILE:within 2 km, centered around NL 42-17-13; WL 85-34-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	850MW7W	581 W (ERP)	

Kalamazoo (KALAMAZOO), MI - NL 42-16-21; WL 85-35-28; MOBILE:within 2 km, centered around NL 42-16-21; WL 85-35-28

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	850MW7W	581 W (ERP)	
27.5-28.35 GHz	MO	850MW7W	4 W (ERP)	

Kalamazoo (KALAMAZOO), MI - NL 42-17-19; WL 85-35-04; MOBILE:within 2 km, centered around NL 42-17-19; WL 85-35-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	MO	850MW7W	4 W (ERP)	
27.5-28.35 GHz	FX	850MW7W	581 W (ERP)	

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (3) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (4) Licensee must avoid pointing the main beam gain transmitting antenna within 10 degrees of any point on the geostationary orbital arc while transmitting signals in the 27.5-28.5 GHz band.

Special Conditions:

- (5) Licensee shall ensure that the transmitting fixed station antenna(s) tip down when possible and avoid pointing above the horizon to protect satellite stations.
- (6) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.