

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

EXPERIMENTAL

(Nature of Service)

WI2XFC

(Call Sign)

XT FX MO

(Class of Station)

0034-EX-CM-2019

(File Number)

NAME Nokia Solutions and Networks US LLC

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) Irving (DALLAS), TX - NL 32-53-37; WL 96-57-57; MOBILE: Nokia building facility, within 2 km
- (2) Arlington Heights (COOK), IL - NL 42-08-08; WL 87-59-56; MOBILE: Nokia building facility, within 2 km
- (3) Euless (TARRANT), TX - NL 32-51-03; WL 97-04-13; MOBILE: Verizon building facility, within 2 km
- (4) South Plainfield (MIDDLESEX), NJ - NL 40-33-15; WL 74-25-47; MOBILE: Verizon building facility, within 2 km
- (5) Basking Ridge (SOMERSET), NJ - NL 40-43-31; WL 74-32-03; MOBILE: Verizon building facility, within 2 km
- (6) Waltham (MIDDLESEX), MA - NL 42-23-43; WL 71-16-18; MOBILE: Verizon building facility, within 2 km
- (7) Murray Hill (UNION), NJ - NL 40-41-02; WL 74-24-04; MOBILE: Nokia building facility, within 2 km
- (8) Framingham (MIDDLESEX), MA - NL 42-54-20; WL 71-26-30; MOBILE: 6-8 Robert Rd, within 2 km
- (9) Schaumburg (COOK), IL - NL 42-03-26; WL 88-04-29; MOBILE: US Cellular campus, within 2 km
- (10) Schaumburg (COOK), IL - NL 42-03-33; WL 88-04-39; MOBILE: US Cellular campus, within 2 km
- (11) Carrollton, TX - NL 32-56-43; WL 96-54-37; MOBILE: Verizon building facility, within 2 km
- (12) Holmdel (MONMOUTH), NJ - NL 40-23-25; WL 74-11-11; MOBILE: Nokia facility, within 2 km
- (13) Highland Park (MIDDLESEX), NJ - NL 40-29-58; WL 74-25-32; MOBILE: 406 Raritan Ave, within 2 km

This authorization effective April 16, 2019 and
will expire 3:00 A.M. EST April 01, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Station Locations

- (14) New York (NEW YORK), NY - NL 40-48-34; WL 73-57-35; MOBILE: Columbia University Facility, within 2 km
- (15) Perry (HOUSTON), GA - NL 32-29-58; WL 83-45-01; MOBILE: Customer location, within 2 km
- (16) New York (NEW YORK), NY - NL 40-49-49; WL 73-04-38; MOBILE: Customer location, within 2 km
- (17) Coppell (DALLAS), TX - NL 32-56-08; WL 96-59-01; MOBILE: Nokia Facility, within 2 km, centered around NL 32-56-08; WL 96-59-01

Frequency Information

Irving (DALLAS), TX - NL 32-53-37; WL 96-57-57; MOBILE: Nokia building facility, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Arlington Heights (COOK), IL - NL 42-08-08; WL 87-59-56; MOBILE: Nokia building facility, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7N	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Frequency Information

Euless (TARRANT), TX - NL 32-51-03; WL 97-04-13; MOBILE: Verizon building facility, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7N	47.8 W (ERP)	

South Plainfield (MIDDLESEX), NJ - NL 40-33-15; WL 74-25-47; MOBILE: Verizon building facility, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Basking Ridge (SOMERSET), NJ - NL 40-43-31; WL 74-32-03; MOBILE: Verizon building facility, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Frequency Information

Waltham (MIDDLESEX), MA - NL 42-23-43; WL 71-16-18; MOBILE: Verizon building facility, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Murray Hill (UNION), NJ - NL 40-41-02; WL 74-24-04; MOBILE: Nokia building facility, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Framingham (MIDDLESEX), MA - NL 42-54-20; WL 71-26-30; MOBILE: 6-8 Robert Rd, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Frequency Information

Schaumburg (COOK), IL - NL 42-03-26; WL 88-04-29; MOBILE: US Cellular campus, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Schaumburg (COOK), IL - NL 42-03-33; WL 88-04-39; MOBILE: US Cellular campus, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Carrollton, TX - NL 32-56-43; WL 96-54-37; MOBILE: Verizon building facility, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7N	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7N	47.8 W (ERP)	

Frequency Information

Holmdel (MONMOUTH), NJ - NL 40-23-25; WL 74-11-11; MOBILE: Nokia facility, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	800MW7 400MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Highland Park (MIDDLESEX), NJ - NL 40-29-58; WL 74-25-32; MOBILE: 406 Raritan Ave, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

New York (NEW YORK), NY - NL 40-48-34; WL 73-57-35; MOBILE: Columbia University Facility, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Frequency Information

Perry (HOUSTON), GA - NL 32-29-58; WL 83-45-01; MOBILE: Customer location, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

New York (NEW YORK), NY - NL 40-49-49; WL 73-04-38; MOBILE: Customer location, within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 W (ERP)	

Coppell (DALLAS), TX - NL 32-56-08; WL 96-59-01; MOBILE: Nokia Facility, within 2 km, centered around NL 32-56-08; WL 9

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	400MW7W 800MW7W	47.8 W (ERP)	
27.5-28.35 GHz	MO	400MW7W 800MW7W	47.8 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 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.
- (3) Licensee shall coordinate each location with the Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d) prior to commencing the first test operation.
- (4) The stop buzzer contact for this project : Glenn Steitz,
glenn.steitz@nokia-bell-labs.com
(973) 214-0028
- (5) 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 27.5-28.35 GHz band.
- (6) Licensee must coordinate each location with any incumbent Fixed Microwave Service licensees and any auction licensees.