

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

EXPERIMENTAL

(Nature of Service)

XD MO

(Class of Station)

WH2XAV

(Call Sign)

0117-EX-CM-2018

(File Number)

NAME Microsoft Corporation

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(d j) of the Commission's Rules

Station Locations

- (1) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-42; WL 122-08-30
- (2) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-59; WL 122-08-35
- (3) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-37; WL 122-08-30
- (4) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-37; WL 122-08-28
- (5) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-23; WL 122-08-30
- (6) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-35; WL 122-08-08
- (7) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-12; WL 122-07-50
- (8) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-34; WL 122-08-16
- (9) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-21; WL 122-07-50
- (10) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-05; WL 122-08-08
- (11) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-09; WL 122-07-49
- (12) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-10; WL 122-07-41
- (13) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-36-42; WL 122-08-04
- (14) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-40; WL 122-08-12
- (15) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-28; WL 122-07-32
- (16) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-14; WL 122-07-34
- (17) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-50; WL 122-08-00
- (18) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-10; WL 122-08-09
- (19) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-26; WL 122-08-28
- (20) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-14; WL 122-08-25
- (21) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-12; WL 122-07-50
- (22) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-20; WL 122-08-32
- (23) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-22; WL 122-08-29
- (24) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-27; WL 122-08-09
- (25) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-59; WL 122-08-04

This authorization effective July 10, 2018 and
will expire 3:00 A.M. EST March 01, 2020

FEDERAL
COMMUNICATIONS
COMMISSION



Station Locations

(26) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-01; WL 122-08-01

(27) MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-04; WL 122-08-00

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-42; WL 122-08-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-42; WL 122-08-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-59; WL 122-08-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-59; WL 122-08-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-37; WL 122-08-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-37; WL 122-08-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-37; WL 122-08-28

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-37; WL 122-08-28

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-23; WL 122-08-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-23; WL 122-08-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-35; WL 122-08-08

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-35; WL 122-08-08

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-12; WL 122-07-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-12; WL 122-07-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-34; WL 122-08-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-34; WL 122-08-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-21; WL 122-07-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-21; WL 122-07-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-05; WL 122-08-08

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-05; WL 122-08-08

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-09; WL 122-07-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-09; WL 122-07-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-10; WL 122-07-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-10; WL 122-07-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-36-42; WL 122-08-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-36-42; WL 122-08-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-40; WL 122-08-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-40; WL 122-08-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-28; WL 122-07-32

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-28; WL 122-07-32

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-14; WL 122-07-34

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-14; WL 122-07-34

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-50; WL 122-08-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-50; WL 122-08-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-10; WL 122-08-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-10; WL 122-08-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-26; WL 122-08-28

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-26; WL 122-08-28

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-14; WL 122-08-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-14; WL 122-08-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-12; WL 122-07-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-12; WL 122-07-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-20; WL 122-08-32

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-20; WL 122-08-32

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-22; WL 122-08-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-22; WL 122-08-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-27; WL 122-08-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-27; WL 122-08-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-59; WL 122-08-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-38-59; WL 122-08-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	10 uW (Output Power)	

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-01; WL 122-08-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-01; WL 122-08-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-04; WL 122-08-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
866-868 MHz	MO	200KG9D	100 uW (ERP)	
895-900 MHz	MO	5M00F9W	100 uW (ERP)	
900-915 MHz	MO	15M0F9W	100 uW (ERP)	
925-940 MHz	MO	15M0F9W	100 uW (ERP)	
940-945 MHz	MO	5M00F9W	100 uW (ERP)	
945-960 MHz	MO	15M0F9W	100 uW (ERP)	
1710-1785 MHz	MO	40M0F9W	100 uW (ERP)	
1805-1880 MHz	MO	40M0F9W	100 uW (ERP)	
1980-1985 MHz	MO	200KG9W	100 uW (ERP)	
1985-1990 MHz	MO	5M00F9W	100 uW (ERP)	

Frequency Information

MOBILE: Redmond, WA, within 0.05 km, centered around NL 47-39-04; WL 122-08-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2110-2130 MHz	MO	10M0F9W	100 uW (ERP)	
2555-2570 MHz	MO	15M0F9W	100 uW (ERP)	
2675-2690 MHz	MO	15M0F9W	100 uW (ERP)	
3300-4200 MHz	MO	100MF9W	100 uW (ERP)	

Special Conditions:

- (1) Operation requires consent of affected Educational Broadband Service/Broadband Radio Service (EBS/BRS) licensees.
- (2) Operation in the 1695-1780 MHz, 1915-1920 MHz, 1995-2020 MHz or 2110-2200 MHz band requires consent of local Advanced Wireless Service (AWS) licensee(s) to avoid interference.
- (3) 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.
- (4) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) All of the experimental devices will be under control of Microsoft Corp. and they will be retrieved by Microsoft Corp. from the participants upon completion of the experiment.
- (6) This authorization is issued for the express purpose of conducting experimental operations described in the related application. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.
- (7) Microsoft will be responsible for ensuring that the devices are used in authorized locations and in a manner authorized.
- (8) Microsoft 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.

Special Conditions:

- (9) Under this authorization, the total number of experimental devices shall not exceed 6000 units.
- (10) The designated point-of-contact to terminate transmissions if interference occurs is "mcnteam@microsoft.com".
- (11) Prior to commencing any operations, the licensee must obtain consent from the following within 50 miles of the testing area:
 - SMR licensees (809-824 MHz/854-869 MHz)
 - B/ILT licensees (809-824 MHz/854-869 MHz)
 - Commercial Air-Ground licensee (849-851 MHz/894-896 MHz)
 - SMR licensees (896-901 MHz/935-940 MHz)
 - B/ILT licensees (896-901 MHz/935-940 MHz)
 - Narrowband PCS licensees (901-902/930-931/940-941 MHz)
 - Location & Monitoring Service licensees (902-928 MHz)
 - Paging Service licensees in 929 MHz and 931 MHz
 - Broadband PCS licensees (1850-1910 MHz/1930-1990 MHz)
- (12) Coordinate with the local Society of Broadcast Engineers (SBE) frequency coordinator and the affected Fixed Microwave Service licensees prior to operation in 925-940 MHz, 940-945 MHz, and 945-960 MHz bands.
- (13) Maintain operation separation from the grandfathered earth stations as defined in Part 90, Subpart Z, or coordinate an agreement with the grandfathered earth station licensees prior to operation in 3300-4200 MHz band.
- (14) 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.