

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

EXPERIMENTAL

(Nature of Service)

WF2XRB

(Call Sign)

XT MO

(Class of Station)

0389-EX-RR-2012

(File Number)

NAME AKELA Inc.

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 g i) of the Commission's Rules

Station Locations

- (1) MOBILE: research and development site - Santa Barbara, California, within 0.15 km, centered around NL 34-25-00; WL 119-40-59
- (2) MOBILE: research and development site - Santa Barbara, California, within 0.15 km, centered around NL 34-25-46; WL 119-49-13
- (3) MOBILE: research and development site - Santa Barbara, California, within 0.15 km, centered around NL 34-02-58; WL 118-10-30
- (4) MOBILE: research and development site - Santa Barbara, California, within 0.15 km, centered around NL 34-03-31; WL 118-10-10
- (5) MOBILE: research and development site - Castaic, California, within 0.15 km, centered around NL 34-28-52; WL 118-36-22
- (6) MOBILE: within stated radius around test site, within 1 km, centered around NL 38-58-27; WL 76-19-35
- (7) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 27-56-33; WL 82-27-22
- (8) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 38-46-53; WL 77-00-59
- (9) MOBILE: within stated radius around test site, within 1 km, centered around NL 39-54-57; WL 80-44-35
- (10) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 32-42-26; WL 117-09-47
- (11) MOBILE: within stated radius around test site, within 1 km, centered around NL 39-22-55; WL 80-18-26
- (12) MOBILE: within stated radius around test site, within 1 km, centered around NL 39-20-58; WL 77-52-26
- (13) MOBILE: within stated radius around test site, within 1 km, centered around NL 38-21-24; WL 81-42-52

This authorization effective March 01, 2013 and
will expire 3:00 A.M. EST March 01, 2015

**FEDERAL
COMMUNICATIONS
COMMISSION**



Station Locations

- (14) MOBILE: within stated radius around test site, within 1 km, centered around NL 37-56-09; WL 82-00-16
- (15) MOBILE: within stated radius around test site, within 1 km, centered around NL 37-46-52; WL 81-09-38
- (16) MOBILE: within stated radius around test site, within 1 km, centered around NL 39-35-58; WL 79-56-41
- (17) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-19-53; WL 80-04-31
- (18) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-27-54; WL 80-09-48
- (19) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-29-05; WL 80-09-57
- (20) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-29-13; WL 80-08-27
- (21) MOBILE: within stated radius around test site, within 1 km, centered around NL 31-48-30; WL 106-15-17
- (22) MOBILE: within stated radius around test site, within 1 km, centered around NL 33-39-08; WL 84-23-01
- (23) MOBILE: within stated radius around test site, within 0.75 km, centered around NL 33-58-12; WL 83-57-11
- (24) MOBILE: within stated radius around test site, within 1 km, centered around NL 33-58-52; WL 83-58-37
- (25) MOBILE: within stated radius around test site, within 1 km, centered around NL 34-10-40; WL 117-23-05
- (26) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 34-06-16; WL 117-16-23
- (27) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 41-49-50; WL 87-37-26
- (28) MOBILE: within stated radius around test site, within 1 km, centered around NL 41-52-41; WL 87-39-35
- (29) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 42-44-04; WL 84-28-48
- (30) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 27-53-35; WL 82-47-30
- (31) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 44-19-56; WL 72-45-18
- (32) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 44-58-40; WL 93-15-55
- (33) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-06-34; WL 84-31-16
- (34) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-57-52; WL 83-00-15
- (35) MOBILE: within stated radius around test site, within 1 km, centered around NL 39-58-42; WL 83-04-42
- (36) MOBILE: within stated radius around test site, within 1 km, centered around NL 38-51-16; WL 77-22-28
- (37) MOBILE: within stated radius around test site, within 1 km, centered around NL 39-25-54; WL 80-11-36

Station Locations

- (38) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-36-32; WL 79-58-33
- (39) MOBILE: within stated radius around test site, within 1 km, centered around NL 38-22-52; WL 81-45-29
- (40) MOBILE: within stated radius around test site, within 0.25 km, centered around NL 38-54-11; WL 76-59-46

Frequency Information

MOBILE: research and development site - Santa Barbara, California, within 0.15 km, centered around NL 34-25-00; WL 119-40-59

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2900-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: research and development site - Santa Barbara, California, within 0.15 km, centered around NL 34-25-46; WL 119-49-13

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2900-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: research and development site - Santa Barbara, California, within 0.15 km, centered around NL 34-02-58; WL 118-10-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2900-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: research and development site - Santa Barbara, California, within 0.15 km, centered around NL 34-03-31; WL 118-10-10

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2900-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

Frequency Information

MOBILE: research and development site - Castaic, California, within 0.15 km, centered around NL 34-28-52; WL 118-36-22

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2900-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 38-58-27; WL 76-19-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 27-56-33; WL 82-27-22

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 38-46-53; WL 77-00-59

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

Frequency Information

MOBILE: within stated radius around test site, within 1 km, centered around NL 39-54-57; WL 80-44-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 32-42-26; WL 117-09-47

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 39-22-55; WL 80-18-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 39-20-58; WL 77-52-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

Frequency Information

MOBILE: within stated radius around test site, within 1 km, centered around NL 38-21-24; WL 81-42-52

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 37-56-09; WL 82-00-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 37-46-52; WL 81-09-38

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 39-35-58; WL 79-56-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

Frequency Information

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-19-53; WL 80-04-31

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-27-54; WL 80-09-48

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-29-05; WL 80-09-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-29-13; WL 80-08-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

Frequency Information

MOBILE: within stated radius around test site, within 1 km, centered around NL 31-48-30; WL 106-15-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 33-39-08; WL 84-23-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.75 km, centered around NL 33-58-12; WL 83-57-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 33-58-52; WL 83-58-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

Frequency Information

MOBILE: within stated radius around test site, within 1 km, centered around NL 34-10-40; WL 117-23-05

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 34-06-16; WL 117-16-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 41-49-50; WL 87-37-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 41-52-41; WL 87-39-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

Frequency Information

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 42-44-04; WL 84-28-48

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 27-53-35; WL 82-47-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 44-19-56; WL 72-45-18

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 44-58-40; WL 93-15-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

Frequency Information

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-06-34; WL 84-31-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-57-52; WL 83-00-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 39-58-42; WL 83-04-42

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 38-51-16; WL 77-22-28

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

Frequency Information

MOBILE: within stated radius around test site, within 1 km, centered around NL 39-25-54; WL 80-11-36

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 39-36-32; WL 79-58-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 1 km, centered around NL 38-22-52; WL 81-45-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

MOBILE: within stated radius around test site, within 0.25 km, centered around NL 38-54-11; WL 76-59-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3100-3500 MHz	MO	15K3N0N	154 mW (ERP)	0.005 %

Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (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.