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Applicant: HTC America
File Number: 1385-EX-ST-2021
STA Confirmation Number EL556898

Request for info from FCC –

With respect to authorization of operation in the 3700-3800 MHz band included in this coordination, WTB/Mobility Division requests additional information on how the applicant will avoid causing harmful interference to incumbent operators in this band, including FSS earth stations. A list of registered incumbent FSS earth stations in the band can be found at the following link: <https://docs.fcc.gov/public/attachments/DA-20-823A2.xls>

Response from HTC -

1. **With respect to the frequencies in the 3700 - 3800 MHz band, this attachment details our analysis of the radio operation for this trial application.**
2. **With Radio Tx power limits enforced to be below -125dBm at the perimeter of the Lumen Field measured by RSRP, HTC America will further ensure the non-interfering of the registered incumbent FSS earth stations operation outside the proximity of 100M radius.**

Here is the detailed analysis.

Below is antenna site information where we plan to have the demo.

Antenna Information	
File Number:	1385-EX-ST-2021
Antenna Location:	Fixed Seattle, Washington
Coordinates:	47 35 42 N latitude 122 19 54 W longitude
Area of Operation:	
Street Address:	800 Occidental S.
City:	Seattle
State:	Washington
Radius of Operation:	0.01

Lumen Field

800 OCCIDENTAL AVE S
SEATTLE WASHINGTON 98134 1200

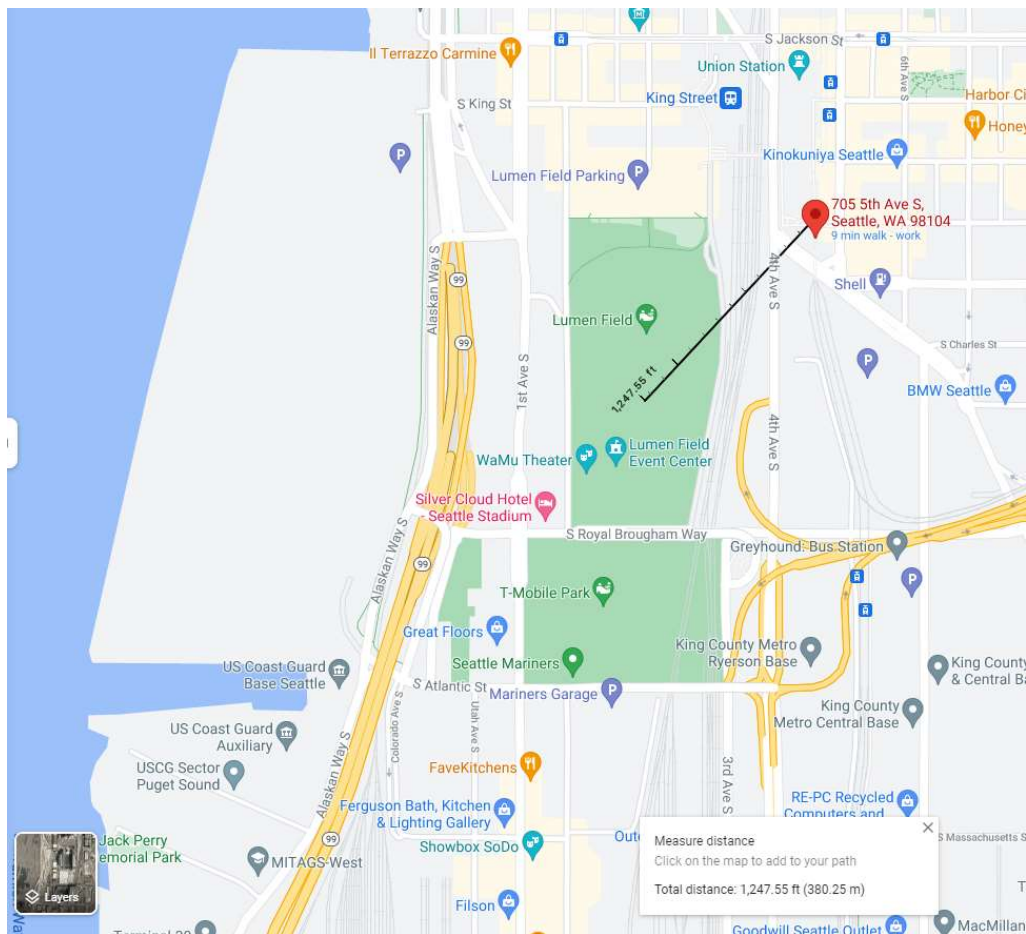
Lat 47.59509 / Long -122.331581

Station Location

City	State	Latitude	Longitude	Mobile	Radius of Operation
Seattle	Washington	North 47 35 42	West 122 19 54		0.01
Datum: NAD 83					

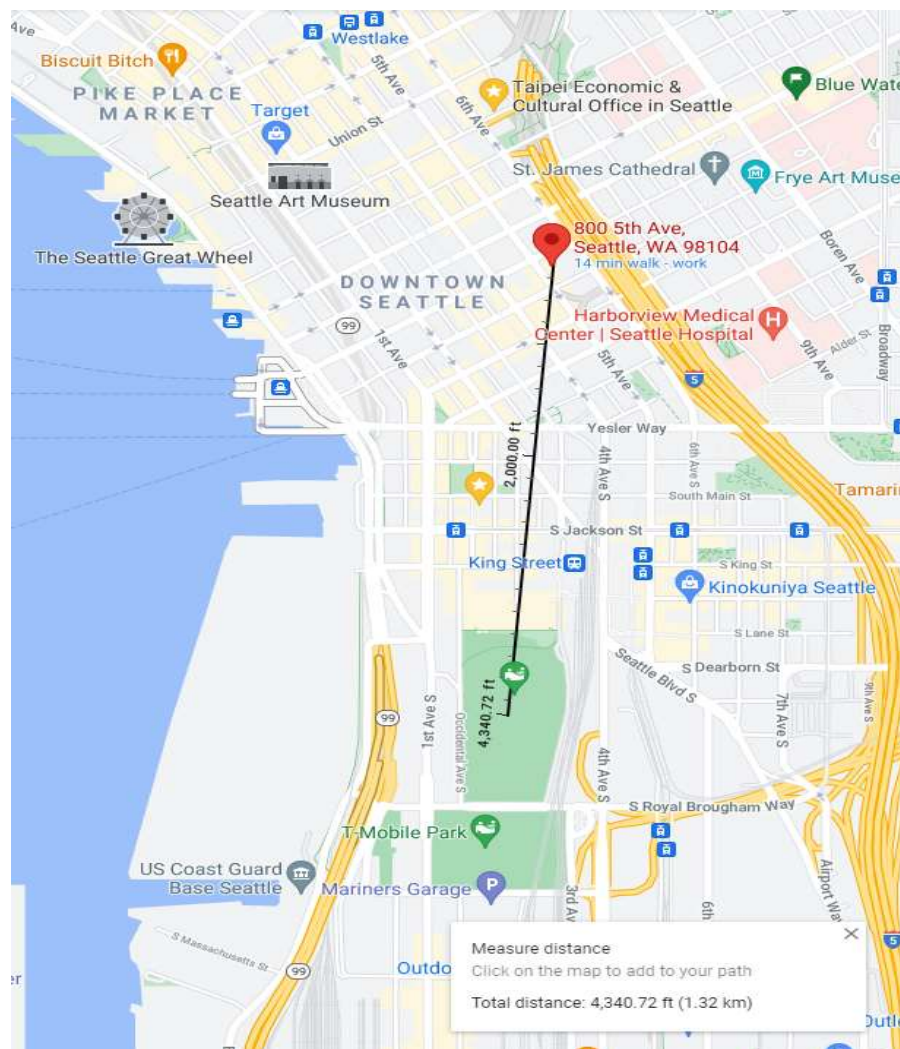
According to the Excel dataset from <https://docs.fcc.gov/public/attachments/DA-20-823A2.xls>, the closest FSS earth station location, which has same postal code 90104, is at 705 5th Ave, South, Seattle. The distance between the nearest one and Lumen Field is about 380M.

ApplicantName	Callsign	Class Of Earth Station	SiteStreet1	SiteCity	Site State	Site Zip Code	LatDeg	LatMin	LatSec	LatHem	LonDeg	LonMin	LonSec	LonHem
Inspiration Media, Inc.	E181418	FES	705 5th ave, South, Suite 350	SEATTLE	King	WA	98104	47	35	47.1	N	122	19	40.1



The second closest one, which is located at 800 5TH AVENUE, Seattle, is about 1.32KM from the Lumen Field, the trial location.

ApplicantName	Callsign	Class Of Earth Station	SiteStreet1	SiteCity	Site State	Site Zip Code	LatDeg	LatMin	LatSec	LatHem	LonDeg	LonMin	LonSec	LonHem
Entercom License, LLC	E201504	FES	800 5TH AVENUE Suite 1400	SEATTLE	KING	WA 98104	47	36	20.6	N	122	19	50.3	



The demo room at Lumen field will be 10M x 10M. The RU TX power (downlink) will be limited to 10dBm max per port (2x2). We will also control the Tx power such that the the RSRP will be less than -125dBm measured at the perimeter of the Lumen Field, including the attenuation from concrete walls and office dividers etc).

With this provisioning in place, the radio signal RSRP will be less than - 230 dBm when it reaches Audacy (formerly Entercom) FFS site at 800 5TH AVENUE (the free space loss is about 106 dB for 3.7GHz with distance of 1.32KM). Similarly, the RSRP of the 3.7GHz radio signal will be less than -220 dBm when it reaches Salem (formerly Inspiration Media) FFS site at 705 5TH AVENUE S (the free space loss is about 95 dB for 3.7GHz with distance of 380M).

Therefore, we concluded that this signal level will not affect any incumbent operators outside the radius of 100 meter from the trial location.

HTC Radio Team