

Ka-Band Earth Stations – Viasat Frequency Coordination Report

28 GHz



Prepared on Behalf of
Viasat, Inc.

July 19, 2018



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1. Summary of Results

On behalf of Viasat, Inc., Comsearch issued coordination notices to all existing and proposed terrestrial licenses within the coordination contours of their proposed Ka-Band earth stations at the 8 locations, which will transmit at 28 GHz¹. Notification letters were sent to the licensees and a copy of the coordination data is provided in section three of this report.

No objections were received from any of the incumbent 28 GHz licensees.

2. 28 GHz Common Carrier, LTTS and UMFUS Coordination

In accordance with FCC Rules and Regulations, the Ka-Band earth stations at the eight locations were prior-coordinated by Comsearch. A notification letter and coordination data for these earth stations were sent to the following 28 GHz common carrier fixed microwave and UMFUS licensees for each proposed earth station location. These licensees are authorized to operate from 27.5-28.35 on a nationwide basis or local basis.

Augusta, GA (33 23 5.17N, 82 00 32.66W)

Licensee	Authorized Geographic Area	Radio Service
AT&T	Statewide: GA	Common Carrier
Broadband One	BTA410, BTA026, BTA022	UMFUS
Frontier	Nationwide	Common Carrier
Sunshine LMDS	BTA2721	UMFUS
T-Mobile	BTA024	UMFUS
Verizon	BTA091, BTA177, BTA024	UMFUS

Boston, MA (42 01 46.6N, 71 00 26.4W)

Licensee	Authorized Geographic Area	Radio Service
Frontier	Nationwide	Common Carrier
T-Mobile	BTA184, BTA051, BTA364, BTA480, BTA427	UMFUS

¹ The proposed earth stations will operate on a shared basis with the licensees identified in this report in the 27.5-28.35 GHz portion of the Ka-Band.

Licensee	Authorized Geographic Area	Radio Service
Verizon	BTA184, BTA051, BTA364, BTA480, BTA427, BTA274	UMFUS

Detroit, MI (42 19 30.6N, 83 04 13.6W)

Licensee	Authorized Geographic Area	Radio Service
123.Net	BTA112	UMFUS
AT&T	Statewide OH and MI	Common Carrier
First Communications	BTA444, BTA084, BTA403	UMFUS
Frontier	Nationwide	Common Carrier
T-Mobile	BTA112	UMFUS
Verizon	BTA112	UMFUS

McAllen, TX (26 10 27.9N, 97 57 50.5W)

Licensee	Authorized Geographic Area	Radio Service
Frontier	Nationwide	Common Carrier

Memphis, TN (34 59 43.6N, 89 52 28.7W)

Licensee	Authorized Geographic Area	Radio Service
AT&T	Statewide	Common Carrier
Frontier	Nationwide	Common Carrier
Verizon	BTA290	UMFUS

Minneapolis, MN (44 51 7.5N, 93 36 1.2W)

Licensee	Authorized Geographic Area	Radio Service
AT&T	Statewide WI	Common Carrier
Frontier	Nationwide	Common Carrier
Verizon	BTA298	UMFUS

Scranton, PA (41 14 45.9N, 75 55 30.7W)

Licensee	Authorized Geographic Area	Radio Service
Frontier	Nationwide	Common Carrier
McKay Brothers	BTA321	UMFUS
T-Mobile	BTA321, BTA346	UMFUS
Verizon	Statewide NJ	Common Carrier
Verizon Wireless	BTA346, BTA321	UMFUS

St Louis, MO (38 11 45.4N, 90 23 24.7W)

Licensee	Authorized Geographic Area	Radio Service
AT&T	Statewide: IL	Common Carrier
Frontier	Nationwide	Common Carrier
Verizon	BTA394	UMFUS
Broadband One	BTA067, BTA308	UMFUS

A notification letter and coordination data for the proposed Ka-Band earth stations at the eight locations were also sent to the following 28 GHz local television transmission licensee. This licensee is authorized to operate from 27.5-28.35 on a nationwide basis.

Licensee	Authorized Geographic Area
Information Super Station, LLC	Continental US

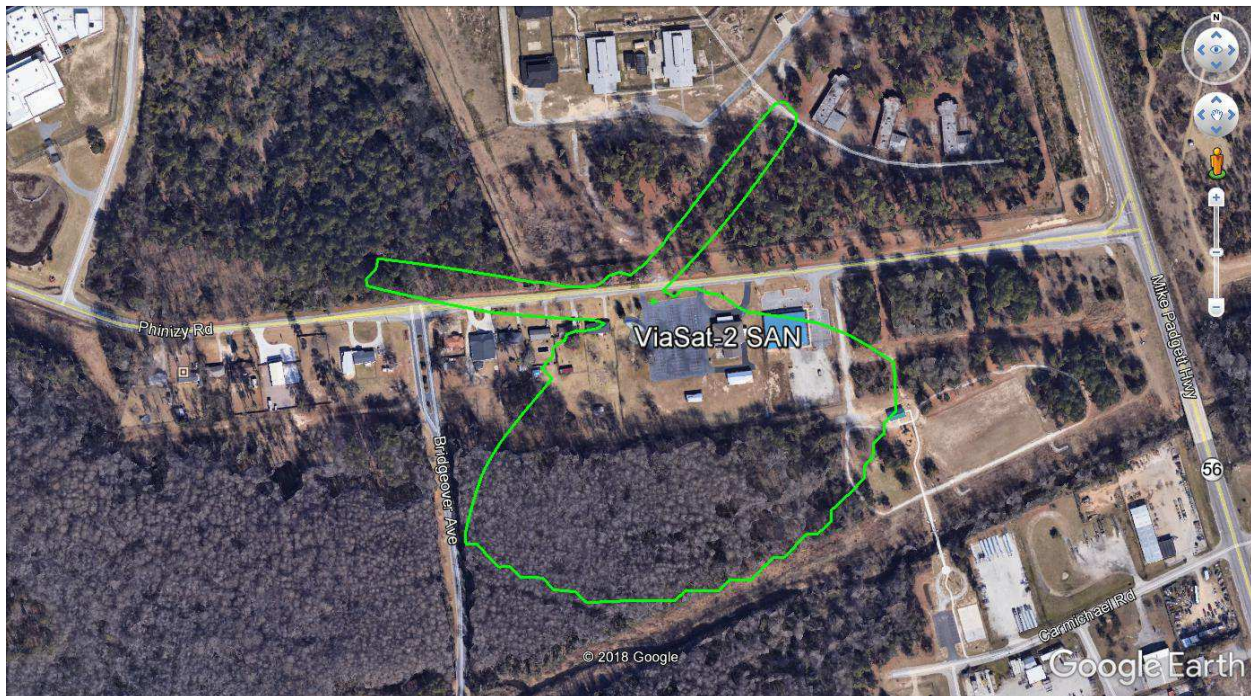
No objections were received from the common carrier, UMFUS or local television transmission service incumbents.

3. Earth Station Coordination Data

This section presents the data pertinent to the proposed Ka-Band earth stations at the eight locations. This data was circulated to all incumbent licensees in the shared 28 GHz frequency ranges.

Augusta, GA

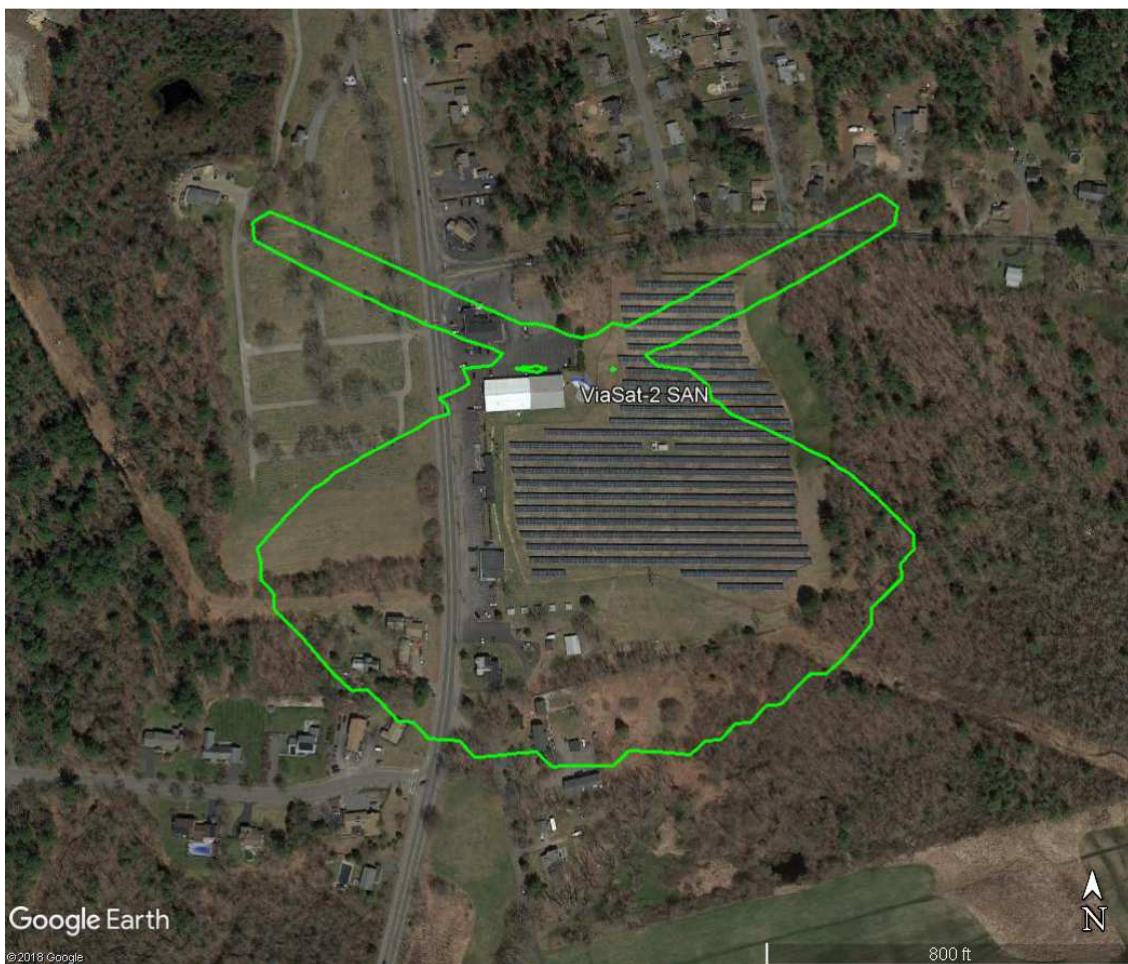
Antenna Type:	Earth Station Antenna
Emissions Designator:	500MG7D
Max EIRP/single carrier:	60.0 dBW
Max EIRP for all carriers:	66.7 dBW
Max EIRP Density towards Horizon:	-57 dBW/4 kHz
Antenna Model:	VA-41-KA
Antenna Centerline:	4.7 m
-77.6 dBm/m² Exceeded:	No



Area around proposed earth station location at Augusta, GA outside of which -77.6 dBm/m² per MHz threshold value measured at a 10-meter reference height is not exceeded

Boston, MA

Antenna Type:	Earth Station Antenna
Emissions Designator:	500MG7D
Max EIRP/single carrier:	60.0 dBW
Max EIRP for all carriers:	66.7 dBW
Max EIRP Density towards Horizon:	TBD but ~ -57 dBW/4 kHz
Antenna Model:	VA-41-KA
Antenna Centerline:	4.7 m
-77.6 dBm/m² Exceeded:	No



Area around proposed earth station location at Boston, MA outside of which -77.6 dBm/m^2 per MHz threshold value measured at a 10-meter reference height is not exceeded

Detroit, MI

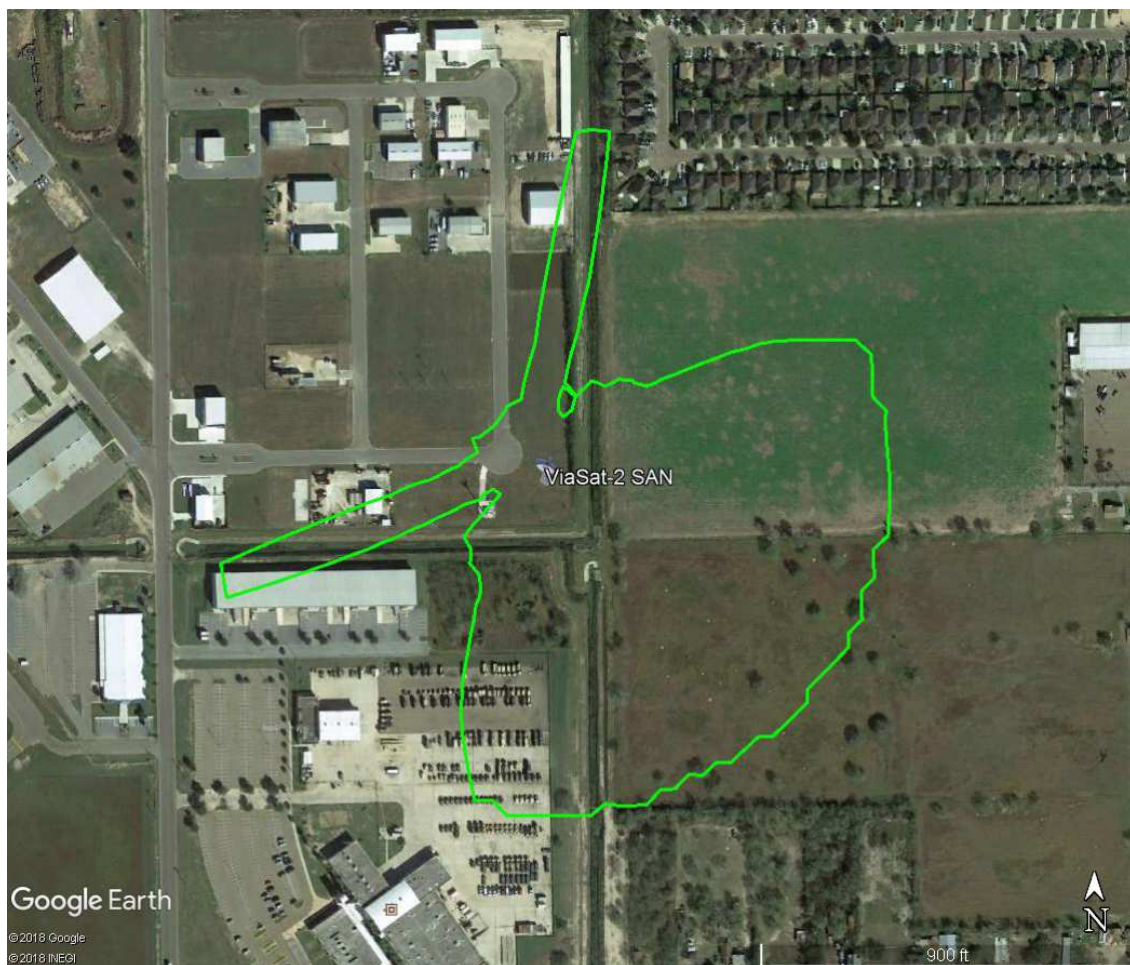
Antenna Type:	Earth Station Antenna
Emissions Designator:	500MG7D
Max EIRP/single carrier:	60.0 dBW
Max EIRP for all carriers:	66.7 dBW
Max EIRP Density towards Horizon:	-57 dBW/4 kHz
Antenna Model:	VA-41-KA
Antenna Centerline:	4.7 m
-77.6 dBm/m² Exceeded:	No



Area around proposed earth station location at Detroit, MI outside of which -77.6 dBm/m² per MHz threshold value measured at a 10-meter reference height is not exceeded

McAllen, TX

Antenna Type:	Earth Station Antenna
Emissions Designator:	500MG7D
Max EIRP/single carrier:	60.0 dBW
Max EIRP for all carriers:	66.7 dBW
Max EIRP Density towards Horizon:	TBD but ~ -57 dBW/4 kHz
Antenna Model:	VA-41-KA
Antenna Centerline:	4.7 m
-77.6 dBm/m² Exceeded:	No



Area around proposed earth station location at McAllen, TX outside of which -77.6 dBm/m^2 per MHz threshold value measured at a 10-meter reference height is not exceeded

Memphis, TN

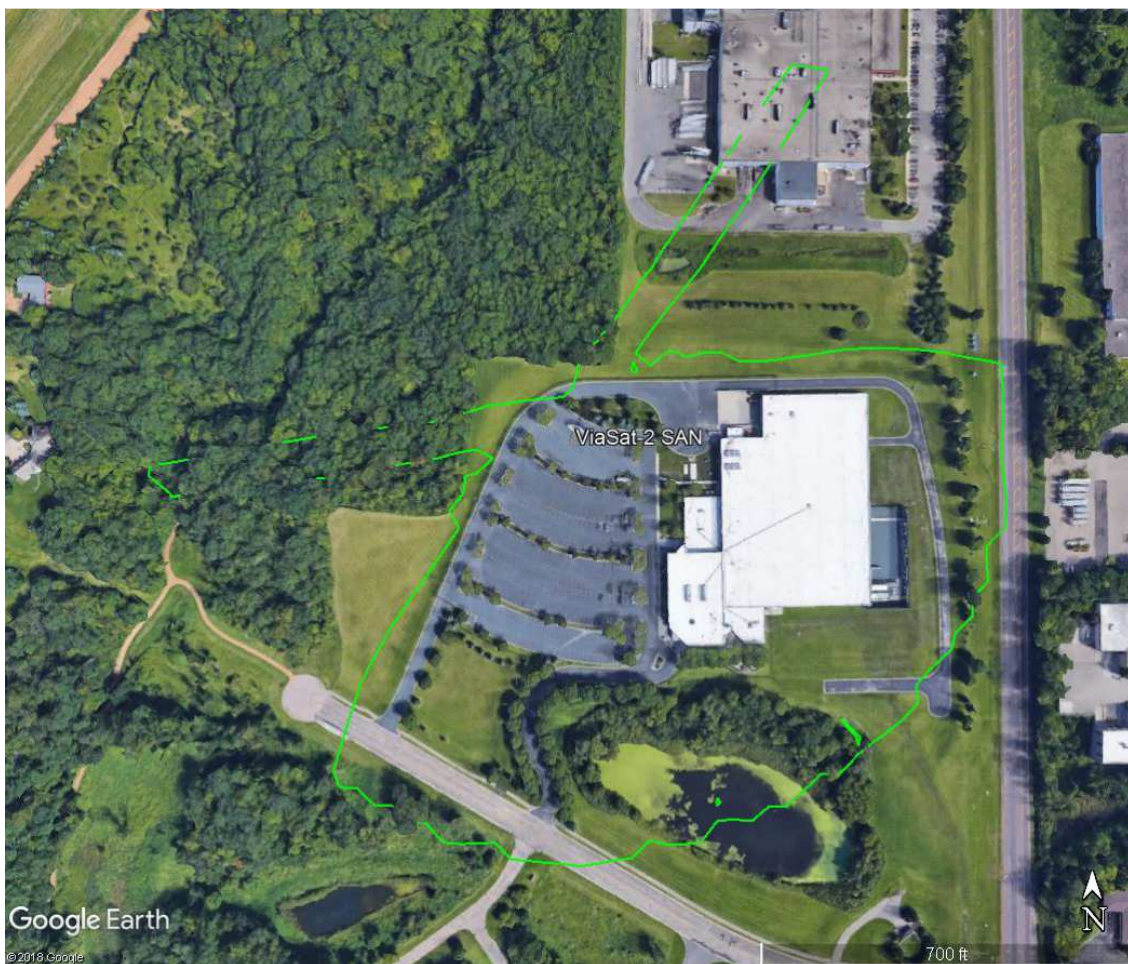
Antenna Type:	Earth Station Antenna
Emissions Designator:	500MG7D
Max EIRP/single carrier:	60.0 dBW
Max EIRP for all carriers:	66.7 dBW
Max EIRP Density towards Horizon:	-57 dBW/4 kHz
Antenna Model:	VA-41-KA
Antenna Centerline:	4.7 m
-77.6 dBm/m² Exceeded:	No



Area around proposed earth station location at Memphis, TN outside of which -77.6 dBm/m² per MHz threshold value measured at a 10-meter reference height is not exceeded

Minneapolis, MN

Antenna Type:	Earth Station Antenna
Emissions Designator:	500MG7D
Max EIRP/single carrier:	60.0 dBW
Max EIRP for all carriers:	66.7 dBW
Max EIRP Density towards Horizon:	-54 dBW/4 kHz
Antenna Model:	VA-41-KA
Antenna Centerline:	4.7 m
-77.6 dBm/m² Exceeded:	No



Area around proposed earth station location at Minneapolis, MN outside of which -77.6 dBm/m² per MHz threshold value measured at a 10-meter reference height is not exceeded

Scranton, PA

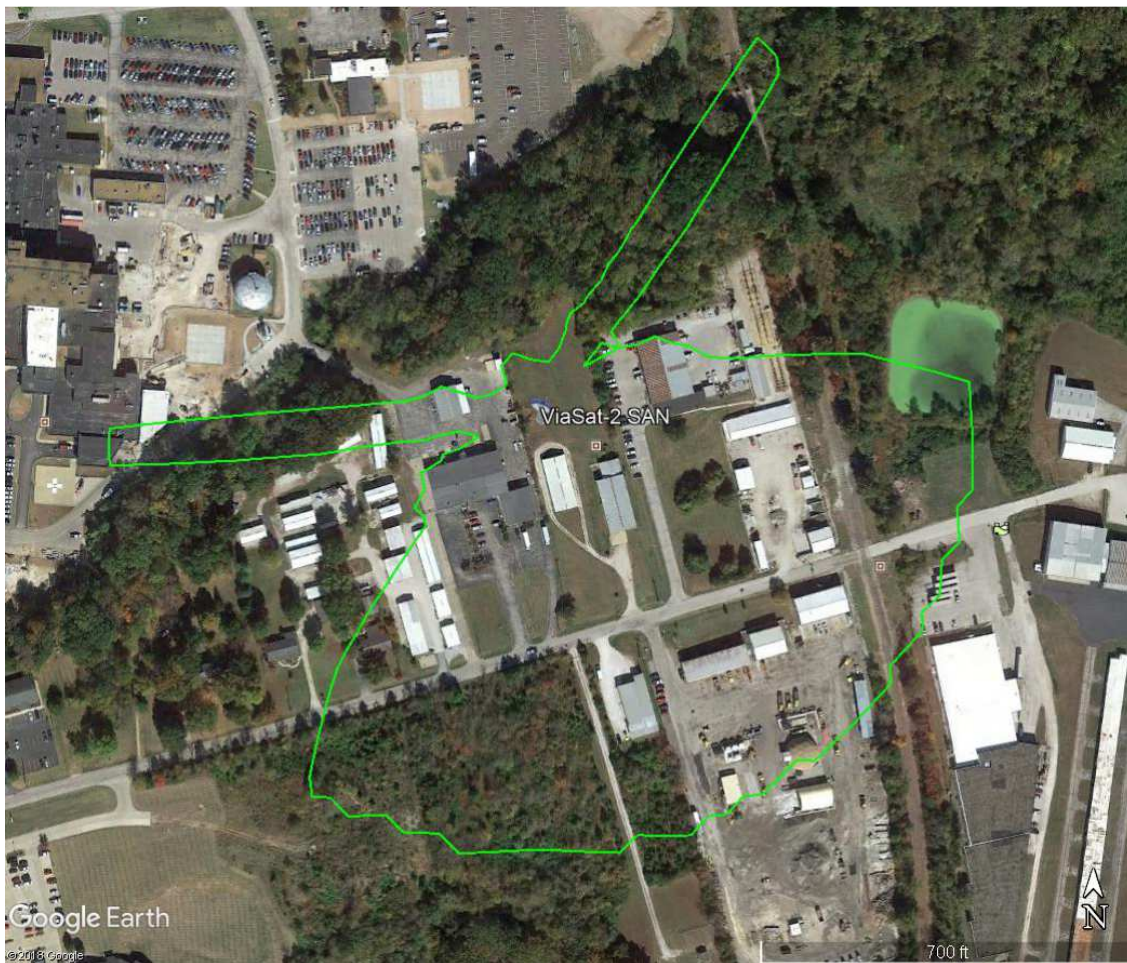
Antenna Type:	Earth Station Antenna
Emissions Designator:	500MG7D
Max EIRP/single carrier:	60.0 dBW
Max EIRP for all carriers:	66.7 dBW
Max EIRP Density towards Horizon:	-58 dBW/4 kHz
Antenna Model:	VA-41-KA
Antenna Centerline:	4.7 m
-77.6 dBm/m² Exceeded:	No



Area around proposed earth station location at Scranton, PA outside of which -77.6 dBm/m² per MHz threshold value measured at a 10-meter reference height is not exceeded

St. Louis, MO

Antenna Type:	Earth Station Antenna
Emissions Designator:	500MG7D
Max EIRP/single carrier:	60.0 dBW
Max EIRP for all carriers:	66.7 dBW
Max EIRP Density towards Horizon:	-57 dBW/4 kHz
Antenna Model:	VA-41-KA
Antenna Centerline:	4.7 m
-77.6 dBm/m² Exceeded:	No



Area around proposed earth station location at St Louis, MO outside of which -77.6 dBm/m² per MHz threshold value measured at a 10-meter reference height is not exceeded

4. Contact Information

For questions or information regarding the 28 GHz Frequency Coordination Report, please contact:

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