

## **Attachment A**

# FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for  
**O3B Limited**  
**PHOENIX, AZ**  
**Satellite Earth Station**

Prepared By:  
COMSEARCH  
19700 Janelia Farm Boulevard  
Ashburn, VA 20147  
June 17, 2020

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## 1. CONCLUSIONS

An interference study considering all existing, proposed and prior coordinated microwave facilities within the coordination contours of the proposed earth station demonstrates that this site will operate satisfactorily with the common carrier microwave environment. Further, there will be no restrictions of its operation due to interference considerations.

## 2. SUMMARY OF RESULTS

A number of great circle interference cases were identified during the interference study of the proposed earth station. Each of the cases, which exceeded the interference objective on a line-of-sight basis, was profiled and the propagation losses estimated using NBS TN101 (Revised) techniques. The losses were found to be sufficient to reduce the signal levels to acceptable magnitudes in every case.

### 3. SUPPLEMENTAL SHOWING

Pursuant to Part 25.203(c) of the FCC Rules and Regulations, the satellite earth station proposed in this application was coordinated by Comsearch using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations.

Coordination data for this earth station was sent to the below listed carriers with a letter dated 05/11/2020.

#### Company

3D Communications  
AC BidCO LLC  
AT&T Corp.  
AT&T Mobility Spectrum LLC - AZ  
AT&T Mobility Spectrum LLC - Southern CA  
ATC Backhaul LLC  
Access Parks LLC  
Affiniti LLC  
Alltel Comm Southwest Holdings Inc.  
Alltel Communications LLC-AZ/CO/NM/NV/UT  
American Medical Response, Inc.  
American Towers LLC  
Apache County Schools  
Arizona Board of Regents Arizona St Univ  
Arizona Board of Regents Univ of Arizona  
Arizona State University - Tempe  
Avondale Police Department  
Bluewire LLC  
Bolt Internet  
Bullhead City Fire Department  
Business Only Broadband, LLC  
Cable One, Inc.  
Casa Grande Union HS Distrist  
Cellco Partnership-AZ/CO/NM/NV/UT  
Central Yavapai Fire District  
Citizens Utilities Rural Company, Inc.  
City of Avondale  
City of Casa Grande  
City of Nogales  
City of Scottsdale  
City of Surprise  
City of Tucson IT Department  
City of Yuma  
Clark, County of  
Clearwire Spectrum Holdings III, LLC  
Cochise County Government  
Coconino County Sheriff's Office  
Commnet Four Corners, LLC  
Conterra Ultra Broadband, LLC  
Copper Canyon Fire and Medical District

Coppernet Systems, Inc.  
Creative Communications Sales & Rentals  
Deer Valley Unified School District  
Desert Diamond Casino  
Desert Mountain Club, Inc  
Desert Mountain Master Association  
Desert iNET  
Drexel Heights Fire District  
Dysart Unified School District  
El Paso Natural Gas Company, LLC  
Electrical District No 3  
Entercom License, LLC  
Escuela de la Raza Unida  
Exterior Networks, LLC  
FIF AireBeam, LLC  
FiberX LLC  
Flagstaff, City of  
Freeport-McMoRan Bagdad Inc  
Freeport-McMoRan Morenci Inc.  
Frontier Communications of the Southwest  
GTT Americas LLC  
Gila Electronics of Yuma, Inc  
Gila River Cellular General Partnership  
Global Telecom & Technology Americas  
Global Telecom & Technology Americas, In  
Golden Valley Cable and Communications  
Golden Vertex Mining  
Golder Ranch Fire District  
GovNET Licenses LLC  
Gutierrez-Palmenberg, Inc.  
Holbrook School District  
Hopi Telecommunications, Inc.  
Hualapai Tribe  
Imperial Irrigation District  
Information Services, Inc  
J.O. Combs Elementary School Dist #44  
KGT LLC  
Lake Havasu City Police Department  
Littleton Unified School District  
Los Angeles SMSA Ltd. Partnership  
MTE Communications  
Maricopa County Ofc of Enterprise Tech  
Maricopa, City of  
Mesa, City of  
Metropolitan Water Dist of So California  
Multimedia Holdings Corporation  
Navajo County  
Navajo Tribal Utility Authority  
Navopache Electric Cooperative, Inc.  
New Cingular Wireless PCS LLC - AZ  
New Cingular Wireless PCS - Los Angeles  
Nextel License Holdings 4 Inc.  
Nextel West Corporation  
Niles Radio Communications  
North West Fire District  
Northland Pioneer College

One Ring Networks, Inc.  
Ormat Technologies  
Paradise Valley Unified School District  
Pendergast School District #92  
Peoria, City of  
Phoenix, City of  
Prescott Valley, Town of  
Prescott, City of  
Qwest Corporation  
Radiology Ltd  
Rio Verde Wireless, LLC  
SBA Towers IX, LLC  
SBI License Corporation  
SWWG, LLC  
Saddleback Communications  
San Bernardino County of California  
Santa Cruz County  
Scottsdale Medical Imaging  
Sedona Fire District  
Shamrock Foods Company  
Simply Bits, LLC  
Skyview Networks  
SmartSky Microwave, LLC  
Smith Bagley, Inc  
Southern California Gas Company  
Spanish Independent Broadcast Network  
Sparkplug Southwest, LLC  
SpeedConnect, LLC  
Sprint PCS  
Sprint Spectrum L.P.  
Sprint Spectrum LP DBA Sprint PCS  
Sprint Telephony PCS, L.P.  
Sprintcom, Inc  
Strategic Technology Communications, Inc  
Sun City West Fire District  
T-Mobile License LLC  
Table Top Telephone Company  
Taurus Technology Investment Partners  
Telink Networks SW, LLC  
Tempe Union High School District #213  
Tempe, City of  
Texas Telecommunications, LP  
Time Warner Cable Pacific West LLC  
Town of Florence  
Town of Gilbert, AZ  
Transworld Network Corp  
Triad Wireless  
Tristate Wifi LLC  
Tucson Electric Power Company  
Union Pacific Railroad Company  
Univision Radio Stations Group, Inc.  
Valley Telephone Cooperative, Inc.  
Verizon Wireless (VAW) LLC (Southern CA)  
Verizon Wireless(VAW) LLC-AZ/CO/NM/NV/UT  
Wecom, Inc.  
WireFree Communications, Inc.



XO Communications, LLC  
Xiber, LLC  
Yuma County Water Users Association  
Zito West Holding, LLC

## **4. EARTH STATION COORDINATION DATA**

This section presents the data pertinent to frequency coordination of the proposed earth station that was circulated to all carriers within its coordination contours.

# COMSEARCH

## Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147  
(703)726-5500 <http://www.comsearch.com>

Date: 06/17/2020  
Job Number: 200511COMSGE01

### Administrative Information

Status ENGINEER PROPOSAL  
Call Sign  
Licensee Code P3210  
Licensee Name O3B Limited

### Site Information

#### PHOENIX, AZ

Venue Name  
Latitude (NAD 83) 33° 33' 48.4" N  
Longitude (NAD 83) 112° 20' 14.9" W  
Climate Zone A  
Rain Zone 5  
Ground Elevation (AMSL) 334.46 m / 1097.3 ft

### Link Information

Satellite Type Medium Earth Orbit  
Mode TR - Transmit-Receive  
Modulation Digital  
Minimum Elevation Angle 5.0°  
Azimuth Range 0.0° to 360°  
Antenna Centerline (AGL) 2.74 m / 9.0 ft

### Antenna Information

#### Receive - FCC32

#### Transmit - FCC32

Manufacturer	CGC 5.5m	CGC 5.5m
Model	Type 5-X/Y	Type 5-X/Y
Gain / Diameter	59.9 dBi / 5.5 m	62.6 dBi / 5.5 m
3-dB / 15-dB Beamwidth	0.50° / 1.00°	1.10° / 2.20°

Max Available RF Power	(dBW/4 kHz)	-37.5
	(dBW/MHz)	-13.5

Maximum EIRP	(dBW/4 kHz)	25.1
	(dBW/MHz)	49.1

Interference Objectives:	Long Term	-156.0 dBW/MHz	20%	-151.0 dBW/4 kHz	20%
	Short Term	-146.0 dBW/MHz	0.01%	-128.0 dBW/4 kHz	0.0025%

### Frequency Information

#### Receive 18.0 GHz

#### Transmit 28.0 GHz

Emission / Frequency Range (MHz) 54M0G7D - 850MG7D / 17700.0 - 20200.0 54M0G7D - 850MG7D / 27500.0 - 28350.0

Max Great Circle Coordination Distance	329.4 km / 204.7 mi	125.0 km / 77.7 mi
Precipitation Scatter Contour Radius	100.0 km / 62.1 mi	100.0 km / 62.1 mi

# COMSEARCH

## Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147  
(703)726-5500 <http://www.comsearch.com>

### Coordination Values

### PHOENIX, AZ

Licensee Name	O3B Limited		
Latitude (NAD 83)	33° 33' 48.4" N		
Longitude (NAD 83)	112° 20' 14.9" W		
Ground Elevation (AMSL)	334.46 m / 1097.3 ft		
Antenna Centerline (AGL)	2.74 m / 9.0 ft		
Antenna Model	CGC 5.5m		
Antenna Mode	Receive 18.0 GHz		
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%
	Short Term	-146.0 dBW/MHz	0.01%
Max Available RF Power			Transmit 28.0 GHz
			-128.0 dBW/4 kHz 0.0025%

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 28.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	78.54	14.11	329.40	14.11	125.00
5	0.00	74.09	14.11	329.40	14.11	125.00
10	0.00	69.67	14.11	329.40	14.11	125.00
15	0.00	65.28	14.11	329.40	14.11	125.00
20	0.00	60.94	14.11	329.40	14.11	125.00
25	0.00	56.66	14.11	329.40	14.11	125.00
30	0.00	52.46	14.11	329.40	14.11	125.00
35	0.00	48.37	14.11	329.40	14.11	125.00
40	0.00	44.41	14.11	329.40	14.11	125.00
45	0.00	40.64	14.11	329.40	14.11	125.00
50	0.00	37.10	14.11	329.40	14.11	125.00
55	0.00	33.87	14.11	329.40	14.11	125.00
60	0.00	31.05	14.11	329.40	14.11	125.00
65	0.00	28.77	14.11	329.40	14.11	125.00
70	0.00	27.16	14.11	329.40	14.11	125.00
75	0.00	26.34	14.11	329.40	14.11	125.00
80	0.00	26.40	14.11	329.40	14.11	125.00
85	0.00	27.31	14.11	329.40	14.11	125.00
90	0.00	29.01	14.11	329.40	14.11	125.00
95	0.00	31.36	14.11	329.40	14.11	125.00
100	0.00	34.23	14.11	329.40	14.11	125.00
105	0.00	37.50	14.11	329.40	14.11	125.00
110	0.00	41.07	14.11	329.40	14.11	125.00
115	0.00	44.87	14.11	329.40	14.11	125.00
120	0.00	48.85	14.11	329.40	14.11	125.00
125	0.00	52.95	14.11	329.40	14.11	125.00
130	0.00	57.16	14.11	329.40	14.11	125.00
135	0.00	61.45	14.11	329.40	14.11	125.00
140	0.00	65.80	14.11	329.40	14.11	125.00
145	0.00	70.19	14.11	329.40	14.11	125.00
150	0.00	74.62	14.11	329.40	14.11	125.00
155	0.00	79.07	14.11	329.40	14.11	125.00
160	0.00	83.54	14.11	329.40	14.11	125.00
165	0.00	88.02	14.11	329.40	14.11	125.00
170	0.00	92.51	14.11	329.40	14.11	125.00
175	0.00	96.99	14.11	329.40	14.11	125.00
180	0.00	101.46	14.11	329.40	14.11	125.00
185	0.00	105.91	14.11	329.40	14.11	125.00

# COMSEARCH

## Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147  
(703)726-5500 <http://www.comsearch.com>

### Coordination Values

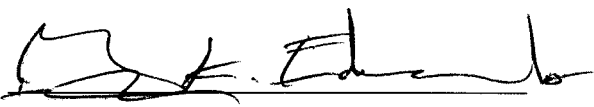
### PHOENIX, AZ

Licensee Name O3B Limited  
Latitude (NAD 83) 33° 33' 48.4" N  
Longitude (NAD 83) 112° 20' 14.9" W  
Ground Elevation (AMSL) 334.46 m / 1097.3 ft  
Antenna Centerline (AGL) 2.74 m / 9.0 ft  
Antenna Model CGC 5.5m  
Antenna Mode Receive 18.0 GHz Transmit 28.0 GHz  
Interference Objectives: Long Term -156.0 dBW/MHz 20% -151.0 dBW/4 kHz 20%  
Short Term -146.0 dBW/MHz 0.01% -128.0 dBW/4 kHz 0.0025%  
Max Available RF Power -37.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 28.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	110.33	14.11	329.40	14.11	125.00
195	0.00	114.72	14.11	329.40	14.11	125.00
200	0.00	119.06	14.11	329.40	14.11	125.00
205	0.00	123.34	14.11	329.40	14.11	125.00
210	0.00	127.54	14.11	329.40	14.11	125.00
215	0.00	131.63	14.11	329.40	14.11	125.00
220	0.00	135.59	14.11	329.40	14.11	125.00
225	0.00	139.36	14.11	329.40	14.11	125.00
230	0.00	142.90	14.11	329.40	14.11	125.00
235	0.00	146.13	14.11	329.40	14.11	125.00
240	0.00	148.95	14.11	329.40	14.11	125.00
245	0.00	151.23	14.11	329.40	14.11	125.00
250	0.00	152.84	14.11	329.40	14.11	125.00
255	0.00	153.66	14.11	329.40	14.11	125.00
260	0.00	153.60	14.11	329.40	14.11	125.00
265	0.00	152.69	14.11	329.40	14.11	125.00
270	0.00	150.99	14.11	329.40	14.11	125.00
275	0.00	148.64	14.11	329.40	14.11	125.00
280	0.00	145.77	14.11	329.40	14.11	125.00
285	0.00	142.50	14.11	329.40	14.11	125.00
290	0.00	138.93	14.11	329.40	14.11	125.00
295	0.00	135.13	14.11	329.40	14.11	125.00
300	0.00	131.15	14.11	329.40	14.11	125.00
305	0.00	127.05	14.11	329.40	14.11	125.00
310	0.00	122.84	14.11	329.40	14.11	125.00
315	0.00	118.55	14.11	329.40	14.11	125.00
320	0.00	114.20	14.11	329.40	14.11	125.00
325	0.00	109.81	14.11	329.40	14.11	125.00
330	0.00	105.38	14.11	329.40	14.11	125.00
335	0.00	100.93	14.11	329.40	14.11	125.00
340	0.00	96.46	14.11	329.40	14.11	125.00
345	0.00	91.98	14.11	329.40	14.11	125.00
350	0.00	87.49	14.11	329.40	14.11	125.00
355	0.00	83.01	14.11	329.40	14.11	125.00

## 5. CERTIFICATION

I HEREBY CERTIFY THAT I AM THE TECHNICALLY QUALIFIED PERSON RESPONSIBLE FOR THE PREPARATION OF THE FREQUENCY COORDINATION DATA CONTAINED IN THIS APPLICATION, THAT I AM FAMILIAR WITH PARTS 101 AND 25 OF THE FCC RULES AND REGULATIONS, THAT I HAVE EITHER PREPARED OR REVIEWED THE FREQUENCY COORDINATION DATA SUBMITTED WITH THIS APPLICATION, AND THAT IT IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: 

Gary K. Edwards  
Senior Manager  
COMSEARCH  
19700 Janelia Farm Boulevard  
Ashburn, VA 20147

DATED: June 17, 2020

# Ka-Band Earth Station – Phoenix, AZ

## Frequency Coordination Report

28 GHz



Prepared on Behalf of  
O3B LIMITED

February 5, 2021



**COMSEARCH**  
A CommScope Company

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## 1. Summary of Results

On behalf of O3B LIMITED, Comsearch performed a coordination notice under Section 25.203(c) and Section 25.136(a)(4) of the FCC’s rules for all existing and proposed terrestrial licenses within the coordination contours of their proposed temporary Ka-Band earth station in Phoenix, AZ, which will transmit at 28 GHz<sup>1</sup>. Prior-notification letters were sent to the licensees and a copy of the notification data is provided in section four of this report. The earth station coordination was finalized on February 5, 2021. A Renewal Notice was sent out on December 18, 2020 to extend the coordination period.

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

## 2. 28 GHz Common Carrier and LTTS Coordination

In accordance with FCC Rules and Regulations, the temporary Ka-Band earth station in Phoenix, AZ was prior-coordinated by Comsearch. A notification letter and datasheets for this earth station were sent to the following 28 GHz common carrier fixed microwave licensees. These licensees are authorized to operate temporary fixed operations from 27.5 – 29.5 GHz on a nationwide basis or local basis.

Licensee	Authorized Geographic Area
Frontier	Nationwide

A notification letter and datasheets for the temporary Ka-Band earth station in Phoenix, AZ were also sent to the following 28 GHz local television transmission licensee. This licensee is authorized to operate temporary fixed operations from 27.5 – 29.5 GHz on a nationwide basis.

Licensee	Authorized Geographic Area
Information Super Station, LLC	Continental US

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

<sup>1</sup> The proposed earth station will operate in the 27.5 – 28.35 GHz portion of the Ka-Band.

### 3. 28 GHz UMFUS Coordination

There were three 28 GHz UMFUS licensees identified within the coordination distance of the proposed temporary earth station. The proposed earth station will operate on frequencies that overlap Channel L1 & L2 of the UMFUS service. The total frequency allocation for Channels L1 & L2 of the UMFUS spectrum appears below.

**Channel:**    **L1**    27.500 - 27.925 GHz  
                  **L2**    27.925 - 28.350 GHz

Licensee	Authorized Geographic Area
Alta Wireless (DISH)	Market-Based
DISH Networks	Market-Based
Verizon	Market-Based

No objections were received from the UMFUS incumbents. Alta Wireless (DISH) identified one operational site in the area.



## **4. Earth Station Coordination Data**

This section presents the data pertinent to the proposed temporary Ka-Band earth station in Phoenix, AZ. This data was circulated to all incumbent licensees in the shared 28 GHz frequency ranges.



Date: 12/17/2020  
 Job Number: <PCNJobCode>

**Administrative Information**

Status ENGINEER PROPOSAL  
 Call Sign <PCNCallSign>  
 Licensee Code 03BLIM  
 Licensee Name O3B Limited

**Site Information PHOENIX, AZ**

Venue Name  
 Latitude (NAD 83) 33° 33' 48.4" N  
 Longitude (NAD 83) 112° 20' 14.9" W  
 Climate Zone A  
 Rain Zone 5  
 Ground Elevation (AMSL) 334.46 m / 1097.3 ft

**Link Information**

Satellite Type Medium Earth Orbit  
 Mode TR - Transmit-Receive  
 Modulation Digital  
 Minimum Elevation Angle 5.0°  
 Azimuth Range 0.0° to 360°  
 Antenna Centerline (AGL) 2.74 m / 9.0 ft

**Antenna Information**

	<b>Receive - FCC32</b>	<b>Transmit - FCC32</b>
Manufacturer	CGC 5.5m	CGC 5.5m
Model	Type 5-X/Y	Type 5-X/Y
Gain / Diameter	59.9 dBi / 5.5 m	62.6 dBi / 5.5 m
3-dB / 15-dB Beamwidth	0.50° / 1.00°	1.10° / 2.20°
Max Available RF Power	(dBW/4 kHz) (dBW/MHz)	-37.5 -13.5
Maximum EIRP	(dBW/4 kHz) (dBW/MHz)	25.1 49.1
Interference Objectives:	Long Term Short Term	-156.0 dBW/MHz 20% -146.0 dBW/MHz 0.01%
		-151.0 dBW/4 kHz 20% -128.0 dBW/4 kHz 0.0025%

**Frequency Information**

	<b>Receive 18.0 GHz</b>	<b>Transmit 28.0 GHz</b>
Emission / Frequency Range (MHz) 30000.0	54M0G7D - 850MG7D / 17700.0 - 18600.0  54M0G7D - 850MG7D / 18800.0 - 20200.0	54M0G7D - 850MG7D / 27500.0 -
Max Great Circle Coordination Distance	329.4 km / 204.7 mi	125.0 km / 77.7 mi
Precipitation Scatter Contour Radius	100.0 km / 62.1 mi	100.0 km / 62.1 mi



**O3B LIMITED**  
**Ka-Band Earth Station – Phoenix, AZ**  
**Frequency Coordination Report**  
**28 GHz**

**Coordination Values**

**PHOENIX, AZ**

Licensee Name	O3B Limited				
Latitude (NAD 83)	33° 33' 48.4" N				
Longitude (NAD 83)	112° 20' 14.9" W				
Ground Elevation (AMSL)	334.46 m / 1097.3 ft				
Antenna Centerline (AGL)	2.74 m / 9.0 ft				
Antenna Model	CGC 5.5m				
Antenna Mode	Receive 18.0 GHz		Transmit 28.0 GHz		
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%	-151.0 dBW/4 kHz	20%
	Short Term	-146.0 dBW/MHz	0.01%	-128.0 dBW/4 kHz	0.0025%
Max Available RF Power	-37.5 (dBW/4 kHz)				

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 28.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	78.54	14.11	329.40	14.11	125.00
5	0.00	74.09	14.11	329.40	14.11	125.00
10	0.00	69.67	14.11	329.40	14.11	125.00
15	0.00	65.28	14.11	329.40	14.11	125.00
20	0.00	60.94	14.11	329.40	14.11	125.00
25	0.00	56.66	14.11	329.40	14.11	125.00
30	0.00	52.46	14.11	329.40	14.11	125.00
35	0.00	48.37	14.11	329.40	14.11	125.00
40	0.00	44.41	14.11	329.40	14.11	125.00
45	0.00	40.64	14.11	329.40	14.11	125.00
50	0.00	37.10	14.11	329.40	14.11	125.00
55	0.00	33.87	14.11	329.40	14.11	125.00
60	0.00	31.05	14.11	329.40	14.11	125.00
65	0.00	28.77	14.11	329.40	14.11	125.00
70	0.00	27.16	14.11	329.40	14.11	125.00
75	0.00	26.34	14.11	329.40	14.11	125.00
80	0.00	26.40	14.11	329.40	14.11	125.00
85	0.00	27.31	14.11	329.40	14.11	125.00
90	0.00	29.01	14.11	329.40	14.11	125.00
95	0.00	31.36	14.11	329.40	14.11	125.00
100	0.00	34.23	14.11	329.40	14.11	125.00
105	0.00	37.50	14.11	329.40	14.11	125.00
110	0.00	41.07	14.11	329.40	14.11	125.00
115	0.00	44.87	14.11	329.40	14.11	125.00
120	0.00	48.85	14.11	329.40	14.11	125.00
125	0.00	52.95	14.11	329.40	14.11	125.00
130	0.00	57.16	14.11	329.40	14.11	125.00
135	0.00	61.45	14.11	329.40	14.11	125.00
140	0.00	65.80	14.11	329.40	14.11	125.00
145	0.00	70.19	14.11	329.40	14.11	125.00
150	0.00	74.62	14.11	329.40	14.11	125.00
155	0.00	79.07	14.11	329.40	14.11	125.00
160	0.00	83.54	14.11	329.40	14.11	125.00
165	0.00	88.02	14.11	329.40	14.11	125.00
170	0.00	92.51	14.11	329.40	14.11	125.00
175	0.00	96.99	14.11	329.40	14.11	125.00
180	0.00	101.46	14.11	329.40	14.11	125.00
185	0.00	105.91	14.11	329.40	14.11	125.00



**O3B LIMITED**  
**Ka-Band Earth Station – Phoenix, AZ**  
**Frequency Coordination Report**  
**28 GHz**

**Coordination Values**

**PHOENIX, AZ**

Licensee Name	O3B Limited		
Latitude (NAD 83)	33° 33' 48.4" N		
Longitude (NAD 83)	112° 20' 14.9" W		
Ground Elevation (AMSL)	334.46 m / 1097.3 ft		
Antenna Centerline (AGL)	2.74 m / 9.0 ft		
Antenna Model	CGC 5.5m		
Antenna Mode	Receive 18.0 GHz		Transmit 28.0 GHz
Interference Objectives:	Long Term	-156.0 dBW/MHz    20%	-151.0 dBW/4 kHz    20%
	Short Term	-146.0 dBW/MHz    0.01%	-128.0 dBW/4 kHz    0.0025%
Max Available RF Power		-37.5 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 28.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	110.33	14.11	329.40	14.11	125.00
195	0.00	114.72	14.11	329.40	14.11	125.00
200	0.00	119.06	14.11	329.40	14.11	125.00
205	0.00	123.34	14.11	329.40	14.11	125.00
210	0.00	127.54	14.11	329.40	14.11	125.00
215	0.00	131.63	14.11	329.40	14.11	125.00
220	0.00	135.59	14.11	329.40	14.11	125.00
225	0.00	139.36	14.11	329.40	14.11	125.00
230	0.00	142.90	14.11	329.40	14.11	125.00
235	0.00	146.13	14.11	329.40	14.11	125.00
240	0.00	148.95	14.11	329.40	14.11	125.00
245	0.00	151.23	14.11	329.40	14.11	125.00
250	0.00	152.84	14.11	329.40	14.11	125.00
255	0.00	153.66	14.11	329.40	14.11	125.00
260	0.00	153.60	14.11	329.40	14.11	125.00
265	0.00	152.69	14.11	329.40	14.11	125.00
270	0.00	150.99	14.11	329.40	14.11	125.00
275	0.00	148.64	14.11	329.40	14.11	125.00
280	0.00	145.77	14.11	329.40	14.11	125.00
285	0.00	142.50	14.11	329.40	14.11	125.00
290	0.00	138.93	14.11	329.40	14.11	125.00
295	0.20	135.03	14.11	329.40	14.11	125.00
300	0.21	131.06	14.11	329.40	14.11	125.00
305	0.21	126.97	14.11	329.40	14.11	125.00
310	0.22	122.77	14.11	329.40	14.11	125.00
315	0.24	118.49	14.11	329.40	14.11	125.00
320	0.24	114.15	14.11	329.40	14.11	125.00
325	0.23	109.77	14.11	329.40	14.11	125.00
330	0.22	105.35	14.11	329.40	14.11	125.00
335	0.21	100.91	14.11	329.40	14.11	125.00
340	0.00	96.46	14.11	329.40	14.11	125.00
345	0.00	91.98	14.11	329.40	14.11	125.00
350	0.00	87.49	14.11	329.40	14.11	125.00
355	0.00	83.01	14.11	329.40	14.11	125.00



## **5. Contact Information**

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

Contact person:	Dennis Jimeno
Title:	Engineer III, Telecommunications
Company:	Comsearch
Address:	19700 Janelia Farm Blvd., Ashburn, VA 20147
Telephone:	703-726-5858
Fax:	703-726-5599
Email:	DJimeno@Comsearch.com
Web site:	www.comsearch.com