

Record Format for Wireless Antenna Locations

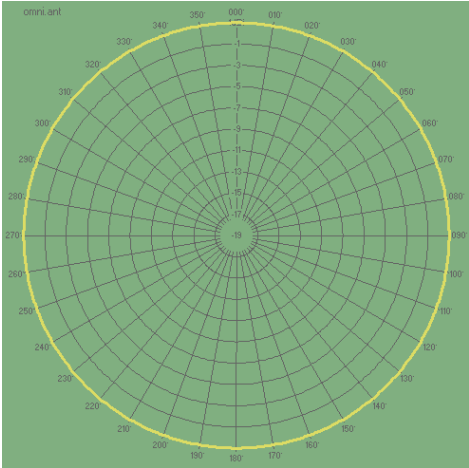
Field	Description	Data Type	Field Length	Example
Provider Identification Data				
ProvName	Provider Name	Text	200	ABC Co.
DBAName	Doing-business-as name	Text	200	Superfone, Inc.
FRN	Provider FCC Registration Number <i>(ONLY numbers no other characters)</i>	Text	10	8402202
Antenna Location Data	Must be completed for each individual physical tower/ antenna.			
Latitude	Latitude of the receiver. Give at least 5 decimal points to ensure accuracy <i>(value must be within 32.5 to 42)</i>	Double		37.750
Longitude	Longitude of the receiver. Give at least 5 decimal points to ensure accuracy <i>(value must be within -114.13 to -124.40)</i>	Double		-122.680
EquipElev	The antenna/transmitter elevation in feet above ground.	Double		2000
Frequency	The antenna/transmitter frequency range in MHz. If only one value is given, that value will be used as the minimum and maximum frequency.	Text	20	2400 - 2600
Output	The transmitter power in Watts.	Text	13	5-300
Threshold	uV (microwatts) <i>"A receiver threshold is the minimum value or set of values that must be exceeded before a receiver is allowed to use or access a wireless network. In this case it is the minimum microvolts that a receiver must receive before it can connect to the wireless network."</i>	Double		1500
Gain	Gain in Decibels (dB)	Double		40 / 45

Field	Description	Data Type	Field Length	Example
Direction	Give the azimuth range that the transmitter covers. Using 0/360 degrees as true north give a minimum and a maximum degree that the transmitter broadcasts to in order to create a range. If the transmitter covers 360 degrees put 0 - 360. If the transmitter does not cover 360 degrees make it clear as to what it does cover for example 90 ó 180 degrees. A single value or a direction (north, south, east, or west) is not a valid range and will not be propagated.	Text	50	30 ó 60 and 90-120
EquipType	Equipment type ó make and model number of transmitting equipment.	Text	50	GT-5527 Digital MMDS Broadband transmitter
EquipStat	Equipment Status ó licensed or unlicensed.	Text	50	Licensed
ReceivElev	Average receiving equipment elevation in feet from ground.	Double		2000
AntType	Antenna/transmitter pattern - (omni, cardio, corner, dipole, ellipse, yagi) (see Wireless Propagation Antenna Patterns)	Text	50	Yagi
TransTech	Category of technology for the provision of service (see Technology of Transmission table)	Short Integer	2	10
Spectrum	Spectrum used to provide service (see Spectrum Used table)	Short Integer	2	1
MaxAdvDown	Speed tier code for the maximum advertised downstream speed available (see Download Speed Tier table)	Text	2	3
MaxAdvUp	Speed tier code for the maximum advertised upstream speed that is offered with the above maximum advertised downstream speed available (see Upload Speed Tier table)	Text	2	1
TypicDown	Speed tier code for the downstream data transfer throughput rate that most subscribers to service at the maximum advertised downstream speed (above) can achieve consistently during expected	Text	2	7

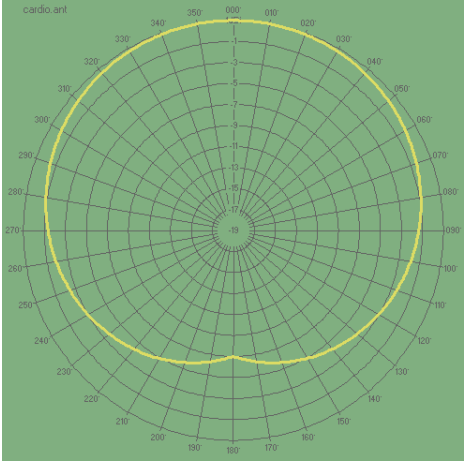
Field	Description	Data Type	Field Length	Example
	periods of heavy network usage (see Download Speed Tier table)			
TypicUp	Speed tier code for the upstream data transfer throughput rate that most subscribers to service at the maximum advertised upstream speed (above) can achieve consistently during expected periods of heavy network usage (see Upload Speed Tier table)	Text	2	2
StateAbbr	State Abbreviation	Text	2	CA

Wireless Propagation Antenna Patterns

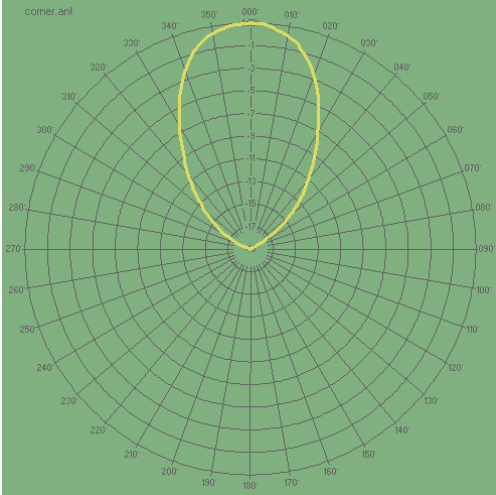
Omni



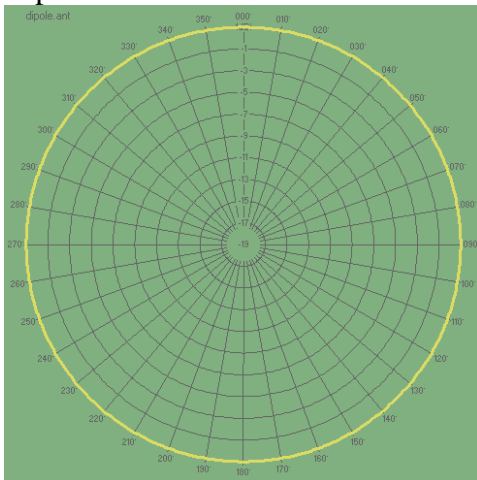
Cardio



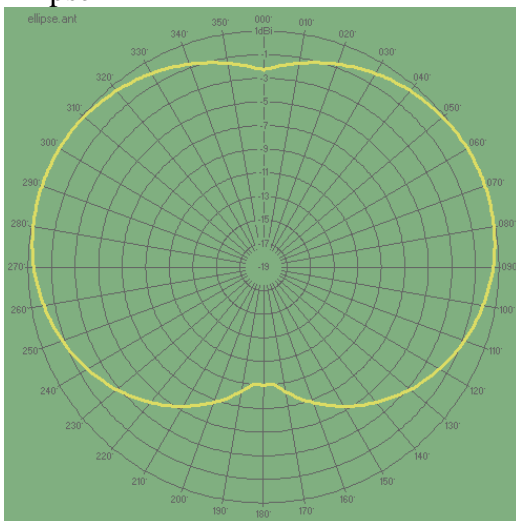
Corner



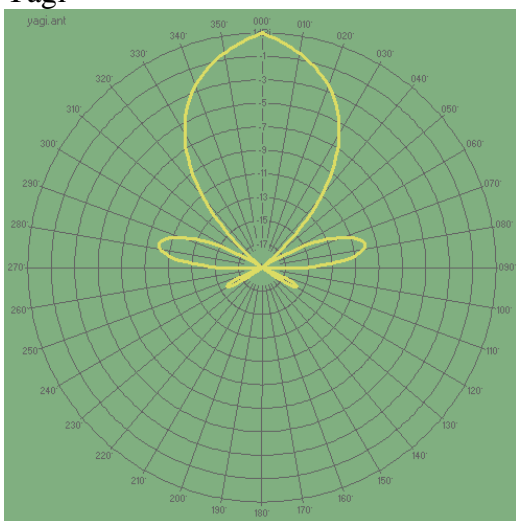
Dipole



Ellipse



Yagi



Technology of Transmission Codes
(Use in TransTech field)

Code	Description
10	Asymmetric xDSL
20	Symmetric xDSL
30	Other Copper Wireline
40	Cable Modem ó DOCSIS 3.0
41	Cable Modem ó Other
50	Optical Carrier/Fiber to the End User
60	Satellite
70	Terrestrial Fixed Wireless - Unlicensed
71	Terrestrial Fixed Wireless - Licensed
80	Terrestrial Mobile Wireless
90	Electric Power Line
0	All Other

Download Speed Tier Codes
(Use in MaxAdvDown, TypicDown fields)

Code	Description
3	Greater than or equal to 768 kbps and less than 1.5 mbps
4	Greater than or equal to 1.5 mbps and less than 3 mbps
5	Greater than or equal to 3 mbps and less than 6 mbps
6	Greater than or equal to 6 mbps and less than 10 mbps
7	Greater than or equal to 10 mbps and less than 25 mbps
8	Greater than or equal to 25 mbps and less than 50 mbps
9	Greater than or equal to 50 mbps and less than 100 mbps
10	Greater than or equal to 100 mbps and less than 1 gbps
11	Greater than or equal to 1 gbps

Upload Speed Tier Codes
(Use in MaxAdvUp, TypicUp fields)

Code	Description
1	Less than or equal to 200 kbps
2	Greater than 200 kbps and less than 768 kbps
3	Greater than or equal to 768 kbps and less than 1.5 mbps
4	Greater than or equal to 1.5 mbps and less than 3 mbps
5	Greater than or equal to 3 mbps and less than 6 mbps
6	Greater than or equal to 6 mbps and less than 10 mbps
7	Greater than or equal to 10 mbps and less than 25 mbps
8	Greater than or equal to 25 mbps and less than 50 mbps
9	Greater than or equal to 50 mbps and less than 100 mbps
10	Greater than or equal to 100 mbps and less than 1 gbps
11	Greater than or equal to 1 gbps

Spectrum Used Codes
(Use in Spectrum field)

Code	Description
1	is Cellular spectrum (824-849 MHz; 862-869) used to provide service
2	is 700 MHz spectrum (698-758 MHz; 775-788 MHz; 805-806 MHz) used to provide service
3	is Broadband Personal Communications Services spectrum (1850-1915 MHz; 1930-1995) used to provide service
4	is Advanced Wireless Services spectrum (1710-1755 MHz; 2100-2155) used to provide service
5	is Broadband Radio Service/Educational Broadband Service spectrum (2496-2690 MHz) used to provide service
6	is Unlicensed (including broadcast television "white spaces") spectrum used to provide service
7	Specialized Mobile Radio Service (SMR) (817-824 MHz; 862-869 MHz; 896-901 MHz; 935-940 MHz)
8	Wireless Communications Service (WCS) spectrum (2305-2320 MHz; 2345-2360 MHz), 3650-3700 MHz
9	Satellite (L-band, Big LEO, Little LEO, 2 GHz)