

2003 Tulsa CSVHFS Antenna Range Results

50-450 MHz by WB0TEM

902-47,100 MHz by WA5VJB with Thanks to WA2VOI

50 MHz

Gain dBd	Call	Description
9.8	WD9IVD	7 element K1FO Mod.
8.4		4 element HyGain
0		Reference Dipole

144 MHz

Gain dBd	Call	Description
15.0	KB0PE	20 element Yagi
12.7	K3IWK	10 element 17.5' HB
12.7	W2RS	MFJ 1717
12.2		Reference Yagi
11.8	WD5AGO	10 element HB
7.0	K5YPV	Modified FM Broadcast 5 element
.3	KA5ONM	Fractal HB Broad Band Dipole
-6.7	W2RS	AEA HotRod

222 MHz

Gain dBd	Call	Description
13.8	K3IWK	17.5' HB 14 ele Yagi (14.0 at SEVHFS)
13.0		Reference Yagi
12.8	WD5AGO	#1 12 element 13' HB Yagi
12.6	KB6PE	11 element CC parts Yagi on 12' boom
11.6	K5LLL	7 element KLM Scrap Yagi
10.8	WD5AGO	#2 8 element HB Yagi on 7' boom

432 MHz

Gain dBd	Call	Description
17.9	KB0HH	40 element HB Yagi on 36' trussed boom
16.8	KB0HH	25 element HB Yagi on 17' boom
15.4	WD9IVD	41 element HB ATV (439 MHz) design based on a K1FO design on 34' boom
15.2	K9UIF	22 element HB K1FO
15.0		Reference Yagi
14.7	K3IWK	#1 22 element on 15.5' boom
14.7	K3IWK	#2 22 element on 15.5' boom (16.7 at SEVHFS)
13.6	WD5AGO	18 element HB Yagi on 12' boom
10.4	N9LHD	4 element Commercial WB Yagi
9.2	K00Z	CC Boomer Circ
6.8	K5LLL	6 element CC
3.2	K00Z	M2 432 Ho Loop
-2	W2RS	MFJ 1717 Dual Bander

902 MHz

Gain dBd	Call	Description
10.8	NN5DX	HB 12 element Yagi
10.7	K00Z	DB Products 800 MHz Corner Reflector
9.9	K5LLL	Commercial 800 MHz Yagi cut down to 902.
9.6	ND2X	AEL H5001 11.5 by 11.5" Horn w dielectric
9.4	ND2X	AEL H5001 11.5 by 11.5" Horn
7.5	NN5DX	Commercial 9 element Yagi
7.5	WA5VJB	Reference 4 element Yagi
6.5	WA5AGO	FAA 1030 Horn 18" x 20"
6.0	WA5VJB	400-1000 MHz PCB LP
5.6	N9LHD	VJB 900-2600 MHz LP
4.9	KD4NOQ	Comm 800 MHz 6 ele Yagi
5.3	W7XU	20 element Loop Antenna remains after it had been hit by a Tornado.

1296 MHz

Gain dBd	Call	Description
18.8	K5PJR	Loop feed 26" x 31" dish
18.7	WD5AGO	25 element Loop Yagi
16.6	KB0PE	25 element Loop Yagi
16.5	H K0GCJ	31" dish with 3 turn Helix feed
5.4	V	Not Circular Polarization
15.2	WA5AGO	FAA Horn 18" x 20"
14.9	ND2X	AEL H5001 11.5 by 11.5" Horn w dielectric
14.7	ND2X	AEL H5001 11.5 by 11.5" Horn
13.0	WA5VJB	10 element Cheap Yagi
9.5	W0AUS	6.7 x 9" Ridged Horn 13" long
6.8	WA5VJB	Reference Horn
5.8	N9LHD	VJB 900-2600 MHz PCB LP
-6.8	K5PJR	Halo

2304 MHz

Gain dBi	Call	Description
17.9	W9HX	45 element Loop Yagi
15.3	ND2X	AEL H5001 11.5 by 11.5" Horn
15.1	ND2X	AEL H 5001 11.5 by 11.5" Horn with dielectric
14.8	WA5VJB	9 element Slot feed patch array by Huber Shuner Reference Horn
12.5	W0AUS	6.7 x 9" Ridged Horn 13" long
12.0	KA0BVZ	30 element HB Yagi
11.5	WD5AGO	8" x 6" AEL H5101 Horn 5.5" long
10.0	H K0GCI	31" dish with Helix Feed
-4.2 V		Not Circular Polarization and Horiz was rotated about 30 deg from the L-Band measurement.
9.9	WA5VJB	Trough Reflector Commercial
5.6	WA5VJB	2-10 GHz PCB LP

2450 MHz

Gain dBi	Call	Description
14.5	WA5VJB	9 element Slot feed patch array by Huber Shuner
13.1		Reference Horn
12.1	KA0BVZ	30 element HB Yagi
12.0	W0AUS	6.7"x 9" Ridged Horn 13" long
5.6	N9LHD	VJB 900-2600 MHz PCB LP
5.1	WA5VJB	VJB 2.1-10 GHz PCB LP

3456 MHz

Gain dBi	Call	Description
16.3	WD5AGO	8" x 6" AEL H5101 Horn 5.5" long
15.6	W0AUS	6.7"x 9" Ridged Horn 13" long
15.5		Reference Horn
14.4	N9LHD	8"x 8" 16 patch array
6.7	N0LNO	Circular Horn 3" dia 7.7" long
5.7	WA5VJB	2.1-10 GHz PCB LP

5760 MHz

Gain dBi	Call	Description
20.9	WD5AGO	8" x 10" Homebrew PCB Horn 18" long
17.5	N9LHD	12" x 12" Patch array with 64 elements
16.8	W0AUS	6.7"x 9" Ridged Horn 13" long
16.4	WA5VJB	ARA DRG 4-10 GHz Ridged Horn
13.4	WD5AGO	8" x 6" AEL H5101 Horn 5.5" long
7.5	W0LNO	1.5 inch dia Horn 7" long
6.0	WA5VJB	2.1-10 GHz PCB LP

10368 MHz

Gain dBi	Call	Description
31.7	W9FZ	18" DBS dish with W1GHZ Feed
31.3	W9FX	Same dish before the tweak
31.4	WA2VOI	18" DBS dish with Chaparral Feed
30.9	WA2VOI	18" DBS dish with the 10/24 GHz feed
30.0	K0KFC	RCA 18" DBS dish with W1GHZ Feed
20.3	W0AUS	HB 4.5" x 5" Horn 6" long
18.3	WA5VJB	8" Cassigrain Dish with Dielectric WG Reference Horn
17.7		
13.8	WA5VJB	ARA DRG 4 -10 GHz Ridged Horn

24192 MHz

Gain dBi	Call	Description
37.7	WA2VOI	18" DBS dish with AA6IW Dual band feed
35.2	WA5VJB	NURAD 12.5" Cassigrain Dish
23.5	WA5VJB	Scientific Atlanta SA 12A-26 WR-28 Horn
22.4	WA5VJB	8" Cassigrain Dish with Dielectric WG
20.7		Reference Horn

47100 MHz

Gain dBi	Call	Description
42.0	W5LUA	16" Commercial WR-22 Dish
27.6	WA5VJB	Scientific Atlanta SA 12A-26 WR-28 Horn used as the reference Antenna
19.5	WA5VJB	3" Rexolite 24 GHz lens antenna with WR-22 feed.