



- **No Tuning Required**
- **Wideband 88-108 MHz**
- **Rugged & Robust Design**
- **5.3 dBd (7.45 dBi) Gain**

ESTIMATED RADIATED POWER (AGAINST 2" POLE)

TX POWER >	RADIATED POWER
1 W	3.3 W
10 W	33.8 W
100 W	338.8 W
600 W	2033 W

Engineered to withstand adverse weather conditions, our 2 bay Dipole Antenna Array and Phasing Harness is designed for efficient FM broadcasting and reception. With robust construction that ensures durability, this antenna is built for reliable 24/7 broadcasting. The package includes mounting hardware for straightforward installation on rooftops or masts. DC grounding provides static protection. Additionally, our H-plane polar diagram accurately reflects real-world gain and performance when mounted on a 2" mast pole.

ELECTRICAL / MECHANICAL SPEC

Figures based on Dipoles mounted 0.3λ from 2" mast

Frequency: Wideband 88-108 MHz (no tuning required)

TX bandwidth: 20MHz

RX bandwidth: 88MHz - 108MHz

Power handling: 600W

VSWR: <1.5:1

Return loss: <-14dB

Gain: 7.45 dBi, 5.3 dBd

Horizontal beamwidth: 196° @ -3dB

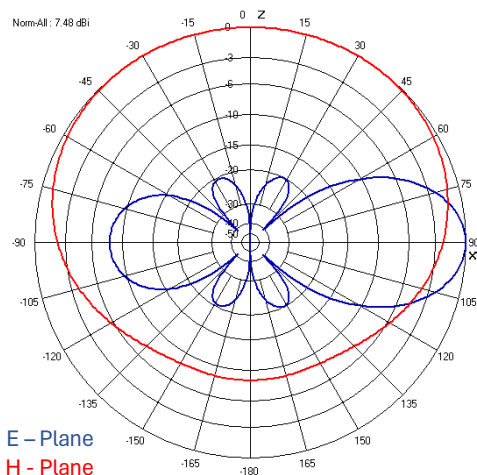
Vertical beamwidth: 34° @ -3dB

Front to back ratio: <8.6dB

Polarisation: Vertical

Connector: N Type

Dimensions: DP length 150cm,
Boom 100cm



Material: Dipole elements \varnothing 15.88mm, Support Boom \varnothing 28.5mm Aluminium

Weather Protection: Injection moulded polypropylene with feed point potted in polyurethane resin.

Fig 1. FREESPACE Polar plots - Antenna in vertical position in FREESPACE

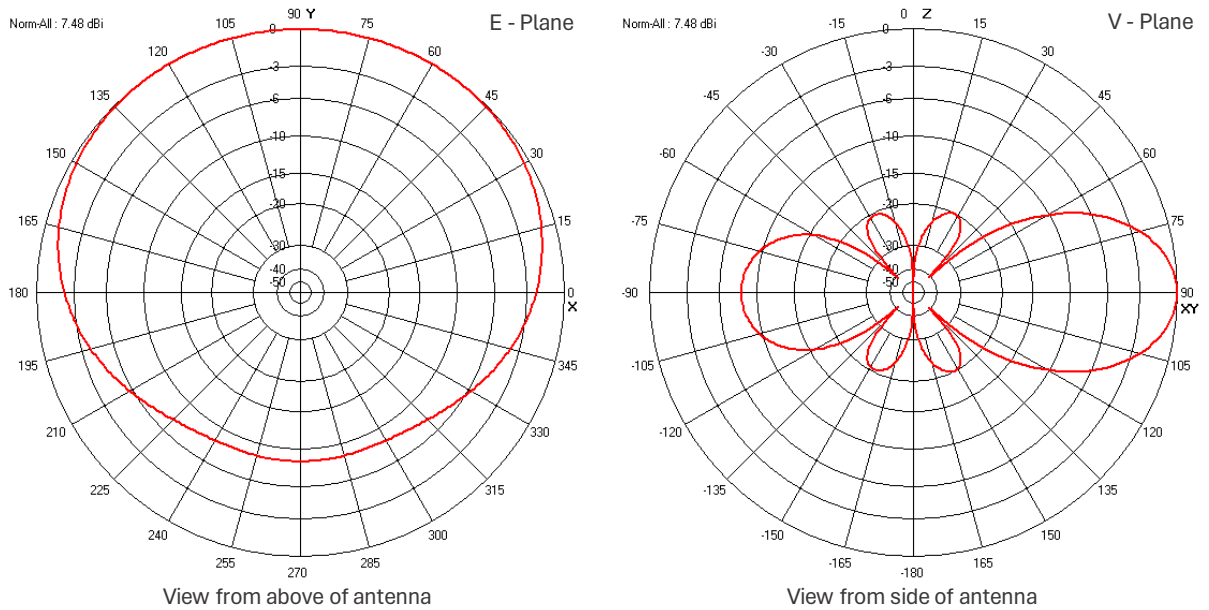


Fig 2. FREESPACE 3D plots - Antenna in vertical position in FREESPACE

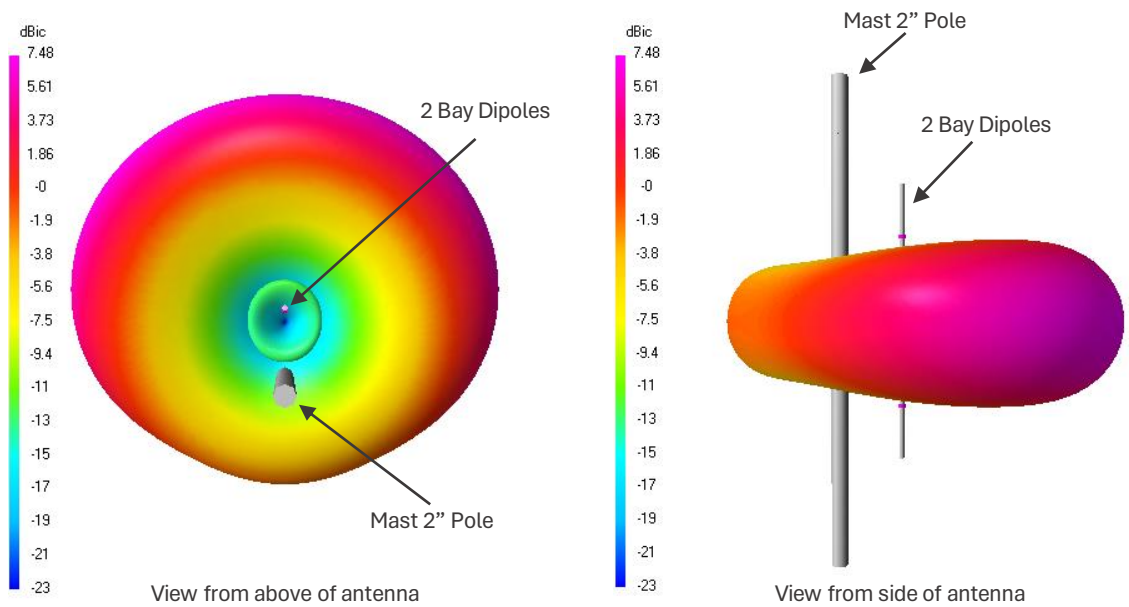
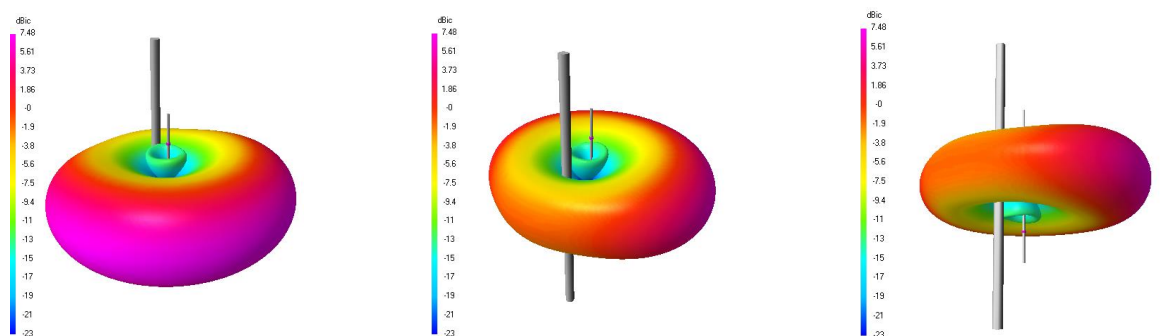
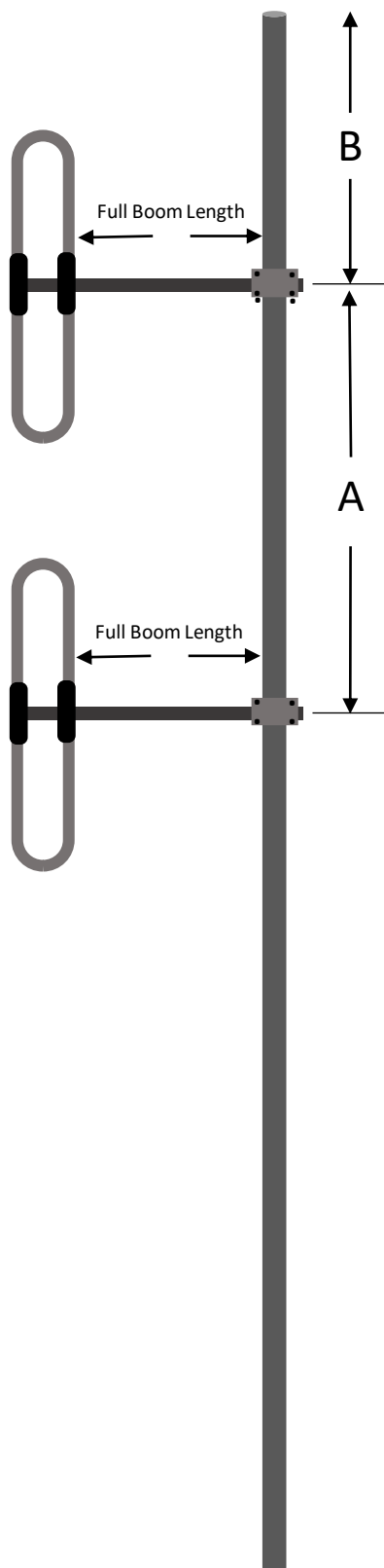
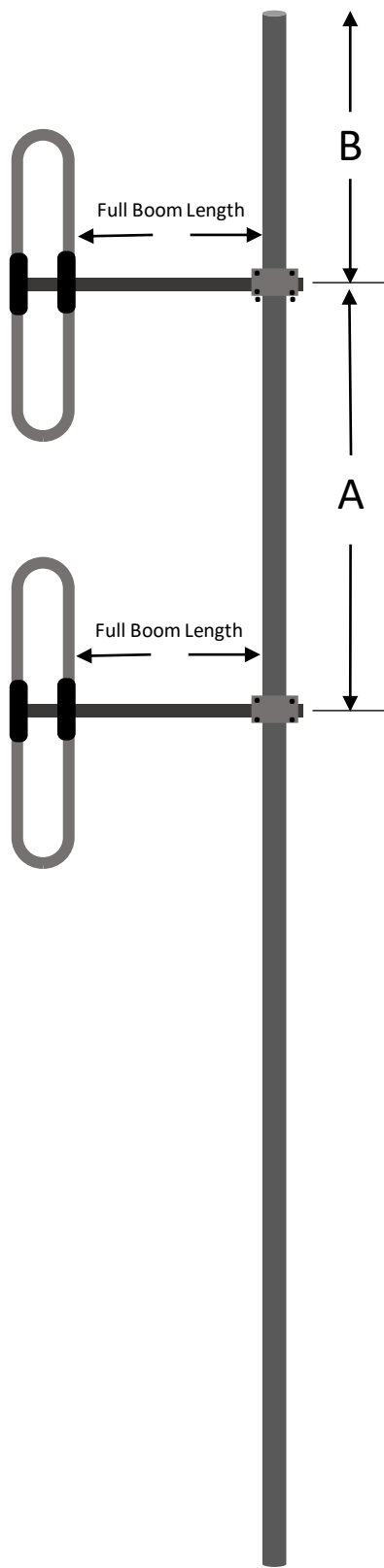


Fig 3. FREESPACE 3D plots - Antenna in vertical position in FREESPACE

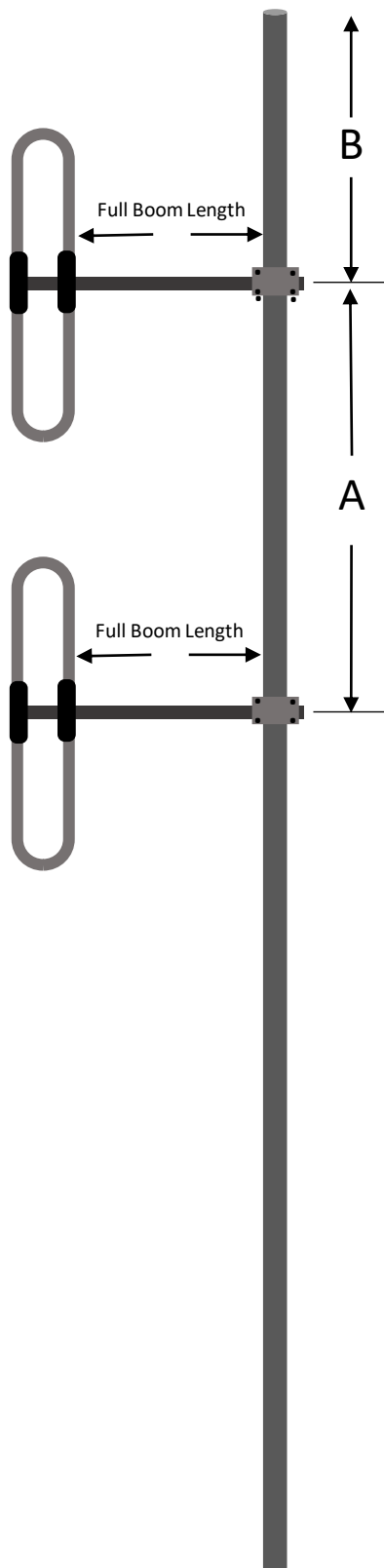




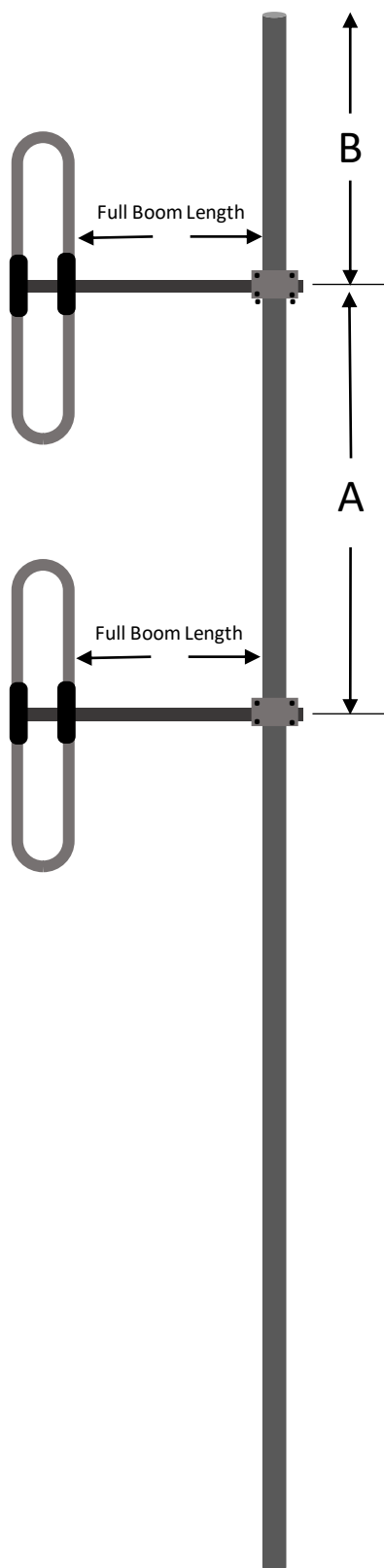
Freq MHz	A	B
87.5	274 cm	171 cm
87.6	274 cm	171 cm
87.7	274 cm	171 cm
87.8	273 cm	171 cm
87.9	273 cm	171 cm
88	273 cm	170 cm
88.1	272 cm	170 cm
88.2	272 cm	170 cm
88.3	272 cm	170 cm
88.4	271 cm	170 cm
88.5	271 cm	169 cm
88.6	271 cm	169 cm
88.7	271 cm	169 cm
88.8	270 cm	169 cm
88.9	270 cm	169 cm
89	270 cm	169 cm
89.1	269 cm	168 cm
89.2	269 cm	168 cm
89.3	269 cm	168 cm
89.4	268 cm	168 cm
89.5	268 cm	168 cm
89.6	268 cm	167 cm
89.7	268 cm	167 cm
89.8	267 cm	167 cm
89.9	267 cm	167 cm
90	267 cm	167 cm
90.1	266 cm	166 cm
90.2	266 cm	166 cm
90.3	266 cm	166 cm
90.4	265 cm	166 cm
90.5	265 cm	166 cm
90.6	265 cm	166 cm
90.7	265 cm	165 cm
90.8	264 cm	165 cm
90.9	264 cm	165 cm
91	264 cm	165 cm
91.1	263 cm	165 cm
91.2	263 cm	164 cm
91.3	263 cm	164 cm
91.4	263 cm	164 cm
91.5	262 cm	164 cm
91.6	262 cm	164 cm
91.7	262 cm	164 cm
91.8	261 cm	163 cm
91.9	261 cm	163 cm
92	261 cm	163 cm



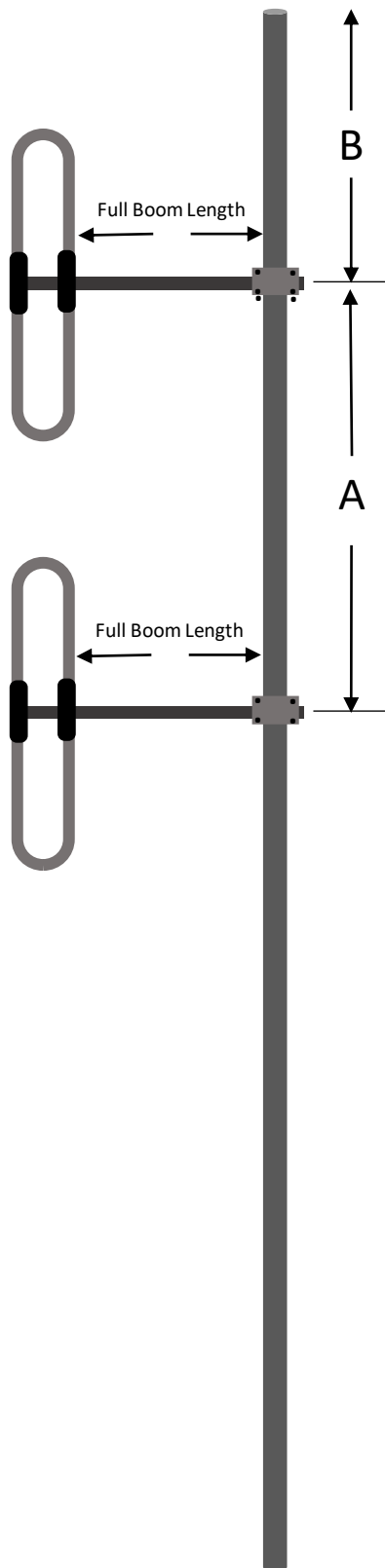
Freq MHz	A	B
92.1	261 cm	163 cm
92.2	260 cm	163 cm
92.3	260 cm	163 cm
92.4	260 cm	162 cm
92.5	259 cm	162 cm
92.6	259 cm	162 cm
92.7	259 cm	162 cm
92.8	259 cm	162 cm
92.9	258 cm	161 cm
93	258 cm	161 cm
93.1	258 cm	161 cm
93.2	258 cm	161 cm
93.3	257 cm	161 cm
93.4	257 cm	161 cm
93.5	257 cm	160 cm
93.6	256 cm	160 cm
93.7	256 cm	160 cm
93.8	256 cm	160 cm
93.9	256 cm	160 cm
94	255 cm	160 cm
94.1	255 cm	159 cm
94.2	255 cm	159 cm
94.3	255 cm	159 cm
94.4	254 cm	159 cm
94.5	254 cm	159 cm
94.6	254 cm	159 cm
94.7	253 cm	158 cm
94.8	253 cm	158 cm
94.9	253 cm	158 cm
95	253 cm	158 cm
95.1	252 cm	158 cm
95.2	252 cm	158 cm
95.3	252 cm	157 cm
95.4	252 cm	157 cm
95.5	251 cm	157 cm
95.6	251 cm	157 cm
95.7	251 cm	157 cm
95.8	251 cm	157 cm
95.9	250 cm	156 cm
96	250 cm	156 cm
96.1	250 cm	156 cm
96.2	249 cm	156 cm
96.3	249 cm	156 cm
96.4	249 cm	156 cm
96.5	249 cm	155 cm
96.6	248 cm	155 cm



Freq MHz	A	B
97.7	246 cm	154 cm
97.8	245 cm	153 cm
97.9	245 cm	153 cm
98	245 cm	153 cm
98.1	245 cm	153 cm
98.2	244 cm	153 cm
98.3	244 cm	153 cm
98.4	244 cm	152 cm
98.5	244 cm	152 cm
98.6	243 cm	152 cm
98.7	243 cm	152 cm
98.8	243 cm	152 cm
98.9	243 cm	152 cm
99	242 cm	152 cm
99.1	242 cm	151 cm
99.2	242 cm	151 cm
99.3	242 cm	151 cm
99.4	241 cm	151 cm
99.5	241 cm	151 cm
99.6	241 cm	151 cm
99.7	241 cm	150 cm
99.8	240 cm	150 cm
99.9	240 cm	150 cm
100	240 cm	150 cm
100.1	240 cm	150 cm
100.2	240 cm	150 cm
100.3	239 cm	150 cm
100.4	239 cm	149 cm
100.5	239 cm	149 cm
100.6	239 cm	149 cm
100.7	238 cm	149 cm
100.8	238 cm	149 cm
100.9	238 cm	149 cm
101	238 cm	149 cm
101.1	237 cm	148 cm
101.2	237 cm	148 cm
101.3	237 cm	148 cm
101.4	237 cm	148 cm
101.5	236 cm	148 cm
101.6	236 cm	148 cm
101.7	236 cm	147 cm
101.8	236 cm	147 cm
101.9	236 cm	147 cm
102	235 cm	147 cm
102.1	235 cm	147 cm
102.2	235 cm	147 cm



Freq MHz	A	B
102.3	235 cm	147 cm
102.4	234 cm	146 cm
102.5	234 cm	146 cm
102.6	234 cm	146 cm
102.7	234 cm	146 cm
102.8	233 cm	146 cm
102.9	233 cm	146 cm
103	233 cm	146 cm
103.1	233 cm	145 cm
103.2	233 cm	145 cm
103.3	232 cm	145 cm
103.4	232 cm	145 cm
103.5	232 cm	145 cm
103.6	232 cm	145 cm
103.7	231 cm	145 cm
103.8	231 cm	145 cm
103.9	231 cm	144 cm
104	231 cm	144 cm
104.1	231 cm	144 cm
104.2	230 cm	144 cm
104.3	230 cm	144 cm
104.4	230 cm	144 cm
104.5	230 cm	144 cm
104.6	229 cm	143 cm
104.7	229 cm	143 cm
104.8	229 cm	143 cm
104.9	229 cm	143 cm
105	229 cm	143 cm
105.1	228 cm	143 cm
105.2	228 cm	143 cm
105.3	228 cm	142 cm
105.4	228 cm	142 cm
105.5	227 cm	142 cm
105.6	227 cm	142 cm
105.7	227 cm	142 cm
105.8	227 cm	142 cm
105.9	227 cm	142 cm
106	226 cm	142 cm
106.1	226 cm	141 cm
106.2	226 cm	141 cm
106.3	226 cm	141 cm
106.4	226 cm	141 cm
106.5	225 cm	141 cm
106.6	225 cm	141 cm
106.7	225 cm	141 cm



Freq MHz	A	B
106.8	225 cm	140 cm
106.9	225 cm	140 cm
107	224 cm	140 cm
107.1	224 cm	140 cm
107.2	224 cm	140 cm
107.3	224 cm	140 cm
107.4	223 cm	140 cm
107.5	223 cm	140 cm
107.6	223 cm	139 cm
107.7	223 cm	139 cm
107.8	223 cm	139 cm
107.9	222 cm	139 cm
108	222 cm	139 cm