

**VHBB 9124 4:1 Balun mit Faltbikonus-Elementen FBAB 9177**  
**VHBB 9124 4:1 Balun with Collapsible Cone Elements FBAB 9177**

**Beschreibung:**

Der Antennenhalter / Balun VHBB 9124 mit kaskadierten Übertragern verfügt über eine außergewöhnlich hohe Symmetrie (Gleichtaktunterdrückung)

Die Faltkonus-Elemente FBAB 9177 haben ähnliche Eigenschaften wie Antennen mit Bikonuselementen BBA 9106 (Rundstrahlcharakteristik in der H-Ebene, „8“-er Charakteristik in der E-Ebene, festes Phasenzentrum und einen vergleichbaren Gewinn).

Faltkonus-Elemente lassen sich hingegen platzsparend zusammenfallen und nehmen so weniger Raum bei Transport und Lagerung ein.

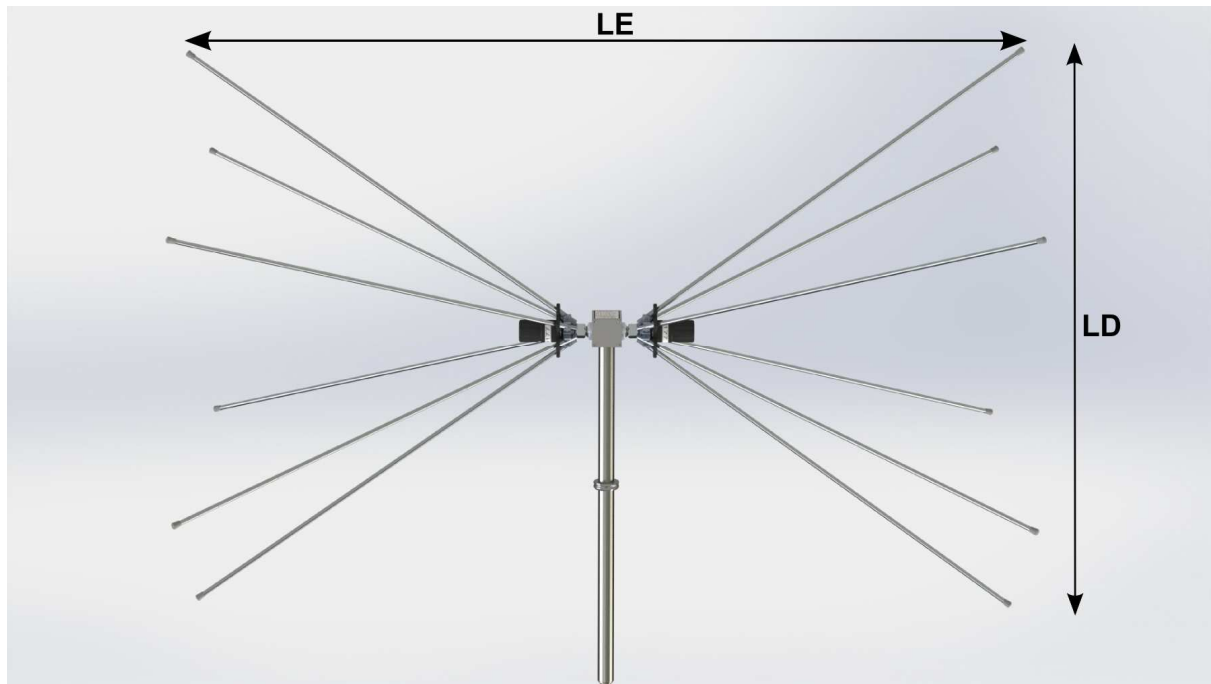
**Description:**

The Antenna Holder / Balun VHBB 9124 with cascaded matching balun provide an extra extraordinary degree of symmetry (common mode rejection).

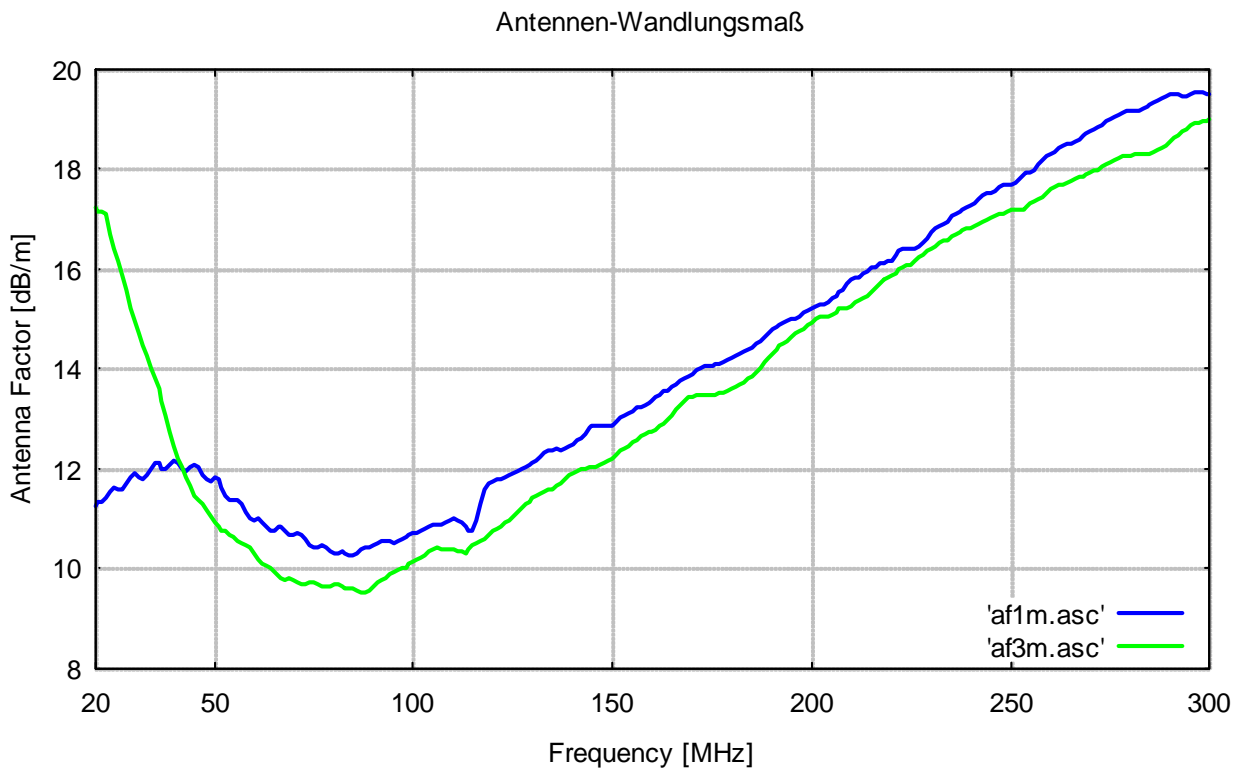
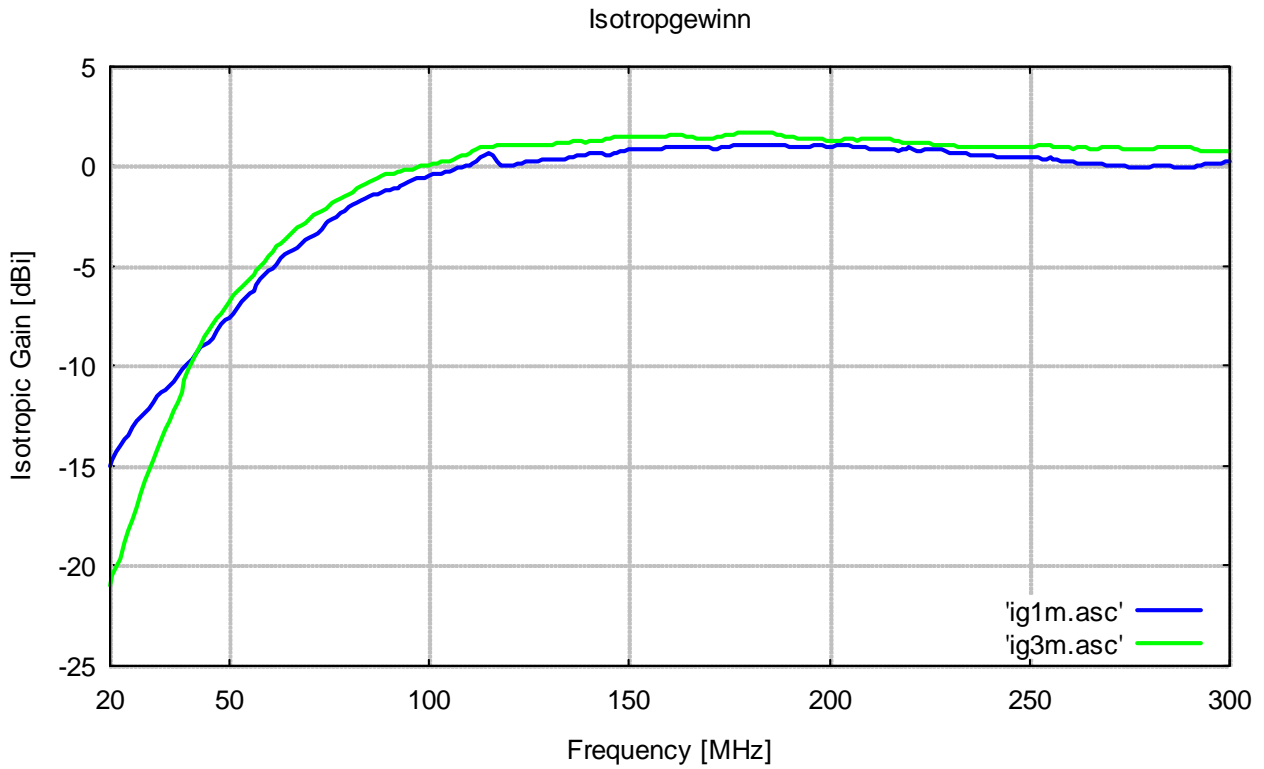
The collapsible open conical elements FBAB 9177 have similar characteristics like antennas with biconical elements BBA 9106 (circular directional pattern in the H-plane. "8"-shaped in the E-plane, fixed phase-center and comparable gain).

The folded collapsible elements need less space during transport or storage than the biconical elements.

Technische Daten:	VHBB 9124 FBAB 9177	Specifications:
Frequenzbereich:	30-300 MHz	Frequency range:
Anschluss:	50 Ω N	Connector:
Max. Leistung:	10 W	Max. Power:
Polarisation:	linear	Polarisation:
Strahlungscharakteristik:	omnidirektional omnidirectional	Pattern type:
Elementlänge LE mit FBAB 9177:	1.25 m	Element length LE with FBAB 9177:
Elementdurchmesser LD	0.60 m	Element diameter LD:
Länge / Durchmesser der Halterung:	0.58 m / 22 mm	Holder length / diameter:
Elementaufnahme:	10 mm	Element fixture:
Gewicht des Halters / Balun:	0.90 kg	Holder / balun weight:
Gewicht eines Elements:	0.45 kg	Weight of one element:
Befestigung:	22 mm Rohr mit Rastring 22 mm tube with indexing ring	Mounting:
Empfohlene Mast-Adapter:	AA 9202, AA9202 POM, AA 9203, RA9215	Recommended mast adapter:



*Folded elements FBAB 9177 in CCA transport case together with VHBB9124 Balun and UHALP 9108A log.-per antenna*  
Gefaltete Konus-Elemente FBAB 9177 in Transport-Koffer CCA zusammen mit VHBB 9124 Balun und UHALP 9108 A Log.-Per. Antenne





Frequency	Isotropic gain 1 m	Antenna factor 1 m	Isotropic gain 3 m	Antenna factor 3 m
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]
20.00	-15.02	11.26	-20.99	17.23
21.00	-14.67	11.33	-20.50	17.17
22.00	-14.26	11.33	-20.08	17.14
23.00	-13.96	11.41	-19.64	17.10
24.00	-13.72	11.54	-18.87	16.70
25.00	-13.43	11.61	-18.22	16.40
26.00	-13.07	11.59	-17.64	16.16
27.00	-12.75	11.60	-17.03	15.88
28.00	-12.53	11.69	-16.40	15.57
29.00	-12.36	11.83	-15.76	15.23
30.00	-12.15	11.91	-15.19	14.95
31.00	-11.80	11.85	-14.68	14.72
32.00	-11.48	11.80	-14.17	14.49
33.00	-11.27	11.86	-13.66	14.25
34.00	-11.15	12.00	-13.17	14.02
35.00	-11.01	12.11	-12.70	13.80
36.00	-10.76	12.11	-12.25	13.59
37.00	-10.43	12.01	-11.77	13.35
38.00	-10.19	12.01	-11.25	13.07
39.00	-10.03	12.07	-10.71	12.75
40.00	-9.89	12.15	-10.19	12.45
41.00	-9.63	12.11	-9.73	12.20
42.00	-9.31	11.99	-9.35	12.03
43.00	-9.06	11.95	-8.96	11.85
44.00	-8.93	12.02	-8.56	11.65
45.00	-8.80	12.08	-8.20	11.48
46.00	-8.57	12.05	-7.89	11.36
47.00	-8.22	11.88	-7.62	11.29
48.00	-7.93	11.77	-7.34	11.19
49.00	-7.74	11.76	-7.04	11.06
50.00	-7.62	11.82	-6.73	10.93
51.00	-7.40	11.77	-6.46	10.83
52.00	-7.07	11.61	-6.24	10.78
53.00	-6.75	11.46	-6.03	10.74
54.00	-6.51	11.38	-5.81	10.68
55.00	-6.36	11.39	-5.60	10.63
56.00	-6.20	11.38	-5.38	10.56
57.00	-5.96	11.30	-5.18	10.52
58.00	-5.63	11.12	-5.00	10.48
59.00	-5.38	11.02	-4.78	10.42
60.00	-5.20	10.98	-4.52	10.30
61.00	-5.06	10.99	-4.26	10.18
62.00	-4.86	10.93	-4.02	10.09
63.00	-4.62	10.83	-3.84	10.04
64.00	-4.42	10.76	-3.67	10.01
65.00	-4.28	10.76	-3.48	9.95
66.00	-4.22	10.83	-3.26	9.87
67.00	-4.08	10.82	-3.07	9.81
68.00	-3.89	10.76	-2.92	9.79
69.00	-3.68	10.68	-2.81	9.80
70.00	-3.56	10.68	-2.65	9.78
71.00	-3.46	10.71	-2.47	9.72
72.00	-3.33	10.70	-2.32	9.68



Frequency	Isotropic gain 1 m	Antenna factor 1 m	Isotropic gain 3 m	Antenna factor 3 m
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]
73.00	-3.11	10.60	-2.20	9.69
74.00	-2.86	10.46	-2.11	9.71
75.00	-2.70	10.42	-2.00	9.72
76.00	-2.60	10.44	-1.84	9.68
77.00	-2.51	10.46	-1.70	9.65
78.00	-2.37	10.43	-1.58	9.65
79.00	-2.18	10.35	-1.49	9.66
80.00	-2.02	10.30	-1.40	9.68
81.00	-1.93	10.32	-1.28	9.67
82.00	-1.85	10.35	-1.13	9.63
83.00	-1.71	10.31	-1.00	9.60
84.00	-1.57	10.28	-0.88	9.59
85.00	-1.46	10.27	-0.78	9.59
86.00	-1.40	10.31	-0.65	9.56
87.00	-1.38	10.39	-0.53	9.54
88.00	-1.32	10.43	-0.43	9.54
89.00	-1.24	10.45	-0.38	9.58
90.00	-1.15	10.45	-0.35	9.66
91.00	-1.10	10.50	-0.32	9.73
92.00	-1.05	10.55	-0.28	9.77
93.00	-0.96	10.55	-0.24	9.83
94.00	-0.87	10.55	-0.21	9.89
95.00	-0.74	10.51	-0.18	9.95
96.00	-0.68	10.55	-0.13	9.99
97.00	-0.62	10.58	-0.06	10.01
98.00	-0.59	10.63	0.01	10.03
99.00	-0.53	10.66	0.05	10.08
100.00	-0.48	10.70	0.08	10.14
101.00	-0.42	10.73	0.11	10.20
102.00	-0.38	10.77	0.17	10.22
103.00	-0.34	10.82	0.20	10.28
104.00	-0.29	10.85	0.22	10.34
105.00	-0.22	10.86	0.25	10.39
106.00	-0.14	10.87	0.32	10.41
107.00	-0.07	10.88	0.41	10.39
108.00	-0.02	10.91	0.51	10.38
109.00	0.00	10.97	0.58	10.39
110.00	0.06	10.99	0.67	10.38
111.00	0.15	10.98	0.77	10.35
112.00	0.29	10.91	0.87	10.34
113.00	0.45	10.83	0.96	10.32
114.00	0.61	10.75	0.98	10.37
115.00	0.68	10.75	0.99	10.45
116.00	0.53	10.98	1.01	10.50
117.00	0.28	11.30	1.04	10.54
118.00	0.06	11.60	1.06	10.59
119.00	0.03	11.70	1.07	10.66
120.00	0.04	11.76	1.03	10.77
121.00	0.09	11.79	1.06	10.82
122.00	0.15	11.80	1.10	10.85
123.00	0.19	11.83	1.11	10.91
124.00	0.21	11.88	1.11	10.98
125.00	0.24	11.92	1.10	11.05



Frequency	Isotropic gain 1 m	Antenna factor 1 m	Isotropic gain 3 m	Antenna factor 3 m
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]
126.00	0.27	11.96	1.10	11.13
127.00	0.30	12.00	1.10	11.20
128.00	0.32	12.04	1.08	11.28
129.00	0.34	12.09	1.08	11.35
130.00	0.38	12.12	1.09	11.41
131.00	0.39	12.18	1.12	11.45
132.00	0.39	12.24	1.15	11.49
133.00	0.39	12.31	1.16	11.54
134.00	0.39	12.37	1.19	11.58
135.00	0.44	12.39	1.22	11.60
136.00	0.50	12.39	1.24	11.65
137.00	0.57	12.38	1.26	11.70
138.00	0.59	12.43	1.23	11.78
139.00	0.61	12.47	1.22	11.86
140.00	0.64	12.50	1.24	11.91
141.00	0.65	12.55	1.26	11.94
142.00	0.64	12.63	1.29	11.98
143.00	0.62	12.71	1.32	12.01
144.00	0.58	12.81	1.36	12.03
145.00	0.59	12.86	1.43	12.02
146.00	0.63	12.88	1.47	12.04
147.00	0.69	12.88	1.49	12.08
148.00	0.77	12.86	1.50	12.12
149.00	0.81	12.87	1.52	12.16
150.00	0.86	12.88	1.53	12.22
151.00	0.85	12.95	1.52	12.28
152.00	0.84	13.02	1.50	12.36
153.00	0.84	13.07	1.49	12.42
154.00	0.85	13.12	1.50	12.47
155.00	0.86	13.17	1.51	12.52
156.00	0.86	13.22	1.50	12.58
157.00	0.89	13.25	1.50	12.64
158.00	0.90	13.29	1.51	12.69
159.00	0.92	13.33	1.53	12.72
160.00	0.93	13.37	1.57	12.74
161.00	0.93	13.43	1.57	12.78
162.00	0.92	13.49	1.56	12.85
163.00	0.92	13.54	1.56	12.91
164.00	0.94	13.58	1.53	12.99
165.00	0.94	13.63	1.49	13.08
166.00	0.92	13.70	1.44	13.18
167.00	0.92	13.75	1.38	13.29
168.00	0.93	13.80	1.36	13.36
169.00	0.92	13.86	1.36	13.42
170.00	0.92	13.91	1.38	13.45
171.00	0.89	13.99	1.40	13.48
172.00	0.91	14.02	1.44	13.49
173.00	0.94	14.04	1.49	13.49
174.00	0.98	14.05	1.56	13.47
175.00	1.01	14.07	1.61	13.47
176.00	1.03	14.10	1.64	13.49
177.00	1.06	14.12	1.67	13.51
178.00	1.08	14.15	1.69	13.54



Frequency	Isotropic gain 1 m	Antenna factor 1 m	Isotropic gain 3 m	Antenna factor 3 m
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]
179.00	1.09	14.19	1.71	13.56
180.00	1.10	14.23	1.73	13.60
181.00	1.12	14.25	1.73	13.64
182.00	1.12	14.30	1.73	13.69
183.00	1.11	14.36	1.74	13.73
184.00	1.11	14.41	1.71	13.80
185.00	1.12	14.44	1.70	13.86
186.00	1.11	14.50	1.67	13.94
187.00	1.09	14.57	1.64	14.02
188.00	1.06	14.64	1.58	14.13
189.00	1.03	14.72	1.52	14.23
190.00	0.99	14.81	1.47	14.32
191.00	0.99	14.85	1.46	14.38
192.00	1.01	14.88	1.43	14.46
193.00	1.01	14.92	1.42	14.51
194.00	1.00	14.98	1.41	14.57
195.00	1.02	15.00	1.40	14.62
196.00	1.05	15.02	1.36	14.70
197.00	1.05	15.06	1.34	14.77
198.00	1.04	15.11	1.34	14.82
199.00	1.02	15.18	1.33	14.87
200.00	1.02	15.22	1.31	14.93
201.00	1.02	15.26	1.30	14.99
202.00	1.04	15.29	1.28	15.05
203.00	1.06	15.31	1.33	15.04
204.00	1.06	15.35	1.36	15.05
205.00	1.04	15.42	1.36	15.09
206.00	1.02	15.48	1.34	15.15
207.00	1.01	15.53	1.33	15.21
208.00	0.99	15.59	1.37	15.21
209.00	0.92	15.70	1.40	15.22
210.00	0.89	15.77	1.40	15.26
211.00	0.88	15.83	1.39	15.32
212.00	0.90	15.85	1.37	15.38
213.00	0.89	15.90	1.36	15.42
214.00	0.87	15.96	1.36	15.47
215.00	0.85	16.02	1.34	15.53
216.00	0.86	16.05	1.29	15.62
217.00	0.81	16.14	1.24	15.71
218.00	0.86	16.13	1.20	15.79
219.00	0.86	16.17	1.20	15.83
220.00	0.92	16.15	1.19	15.87
221.00	0.84	16.27	1.19	15.92
222.00	0.79	16.36	1.16	15.99
223.00	0.77	16.42	1.15	16.03
224.00	0.82	16.40	1.17	16.06
225.00	0.85	16.41	1.17	16.10
226.00	0.89	16.41	1.12	16.18
227.00	0.90	16.44	1.10	16.24
228.00	0.85	16.53	1.08	16.30
229.00	0.79	16.63	1.07	16.35
230.00	0.71	16.74	1.06	16.40
231.00	0.68	16.81	1.03	16.46



Frequency	Isotropic gain 1 m	Antenna factor 1 m	Isotropic gain 3 m	Antenna factor 3 m
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]
232.00	0.67	16.86	1.01	16.52
233.00	0.67	16.90	1.01	16.56
234.00	0.64	16.96	1.01	16.59
235.00	0.59	17.05	1.00	16.64
236.00	0.55	17.13	0.99	16.69
237.00	0.55	17.16	0.98	16.73
238.00	0.56	17.19	0.98	16.77
239.00	0.55	17.24	0.98	16.81
240.00	0.55	17.27	0.98	16.84
241.00	0.53	17.33	0.99	16.87
242.00	0.48	17.42	0.98	16.91
243.00	0.45	17.48	0.98	16.95
244.00	0.46	17.51	0.97	17.00
245.00	0.47	17.53	0.96	17.04
246.00	0.46	17.58	0.96	17.08
247.00	0.44	17.63	0.96	17.11
248.00	0.44	17.67	0.97	17.13
249.00	0.47	17.67	0.98	17.16
250.00	0.48	17.70	0.98	17.19
251.00	0.47	17.74	1.01	17.20
252.00	0.43	17.82	1.05	17.20
253.00	0.40	17.88	1.07	17.21
254.00	0.40	17.92	1.07	17.25
255.00	0.43	17.92	1.03	17.32
256.00	0.40	17.98	1.02	17.36
257.00	0.32	18.10	1.01	17.40
258.00	0.26	18.19	1.00	17.45
259.00	0.23	18.26	0.97	17.52
260.00	0.23	18.29	0.93	17.59
261.00	0.21	18.34	0.91	17.64
262.00	0.16	18.43	0.92	17.67
263.00	0.13	18.49	0.93	17.69
264.00	0.12	18.53	0.93	17.73
265.00	0.16	18.52	0.91	17.78
266.00	0.18	18.54	0.90	17.81
267.00	0.16	18.59	0.91	17.84
268.00	0.12	18.66	0.93	17.85
269.00	0.08	18.74	0.94	17.88
270.00	0.08	18.77	0.92	17.92
271.00	0.07	18.81	0.92	17.96
272.00	0.07	18.84	0.92	17.99
273.00	0.05	18.89	0.90	18.04
274.00	0.02	18.96	0.90	18.08
275.00	-0.01	19.02	0.87	18.14
276.00	-0.02	19.06	0.85	18.19
277.00	-0.02	19.09	0.84	18.23
278.00	-0.03	19.13	0.83	18.27
279.00	-0.03	19.16	0.86	18.28
280.00	-0.01	19.17	0.89	18.27





Frequency	Isotropic gain 1 m	Antenna factor 1 m	Isotropic gain 3 m	Antenna factor 3 m
[MHz]	[dBi]	[dB/m]	dBi	dB/m
281.00	0.01	19.18	0.90	18.30
282.00	0.04	19.18	0.92	18.30
283.00	0.04	19.22	0.94	18.31
284.00	0.02	19.27	0.98	18.30
285.00	-0.00	19.32	1.00	18.32
286.00	-0.01	19.36	0.99	18.36
287.00	-0.01	19.39	0.97	18.40
288.00	-0.02	19.43	0.97	18.44
289.00	-0.03	19.47	0.95	18.49
290.00	-0.03	19.50	0.92	18.55
291.00	-0.01	19.51	0.88	18.62
292.00	0.02	19.51	0.85	18.68
293.00	0.08	19.48	0.81	18.75
294.00	0.11	19.48	0.77	18.82
295.00	0.11	19.51	0.74	18.88
296.00	0.10	19.55	0.74	18.91
297.00	0.13	19.55	0.75	18.93
298.00	0.18	19.52	0.75	18.96
299.00	0.22	19.51	0.76	18.98
300.00	0.26	19.50	0.76	19.00
301.00	0.29	19.50	0.78	19.01
302.00	0.30	19.52	0.78	19.04
303.00	0.33	19.52	0.76	19.09
304.00	0.36	19.52	0.72	19.16
305.00	0.43	19.48	0.67	19.23



VSWR-Plot VHBB 9124 + FBAB 9177

