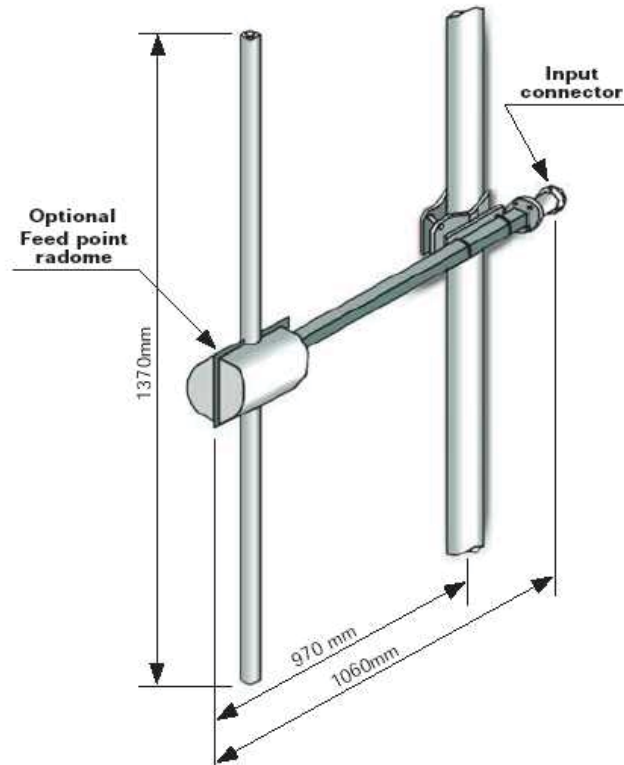


12 Bay TFLBDI 98.1MHz

Novemebr 2015



BEXT, Inc. reserves the right to change, without prior notice, the information contained on this datasheet. While every effort is made to ensure that the details are correct at time of print, BEXT, Inc., cannot be held responsible for any error(s).

BEXT, Inc., is not, nor will be, held liable for any lost profits, damages or claims from third parties incurred due to the use of this datasheet and/or the product(s) described on it.

General data of antenna System

TX station	
Site Name	
System of coordinates	WGS84
Longitude	
Latitude	
Ground level a.s.l. (m)	1.0
Antenna system height (m)	20.0
Transmitter power(Watt)	1.000
Carrier wave frequency (MHz)	98.100
Antenna system central frequency (MHz)	98.100
Antenna base diagrams type 1	TFLBDI
Polarization (H/V/C/X)	V
Transmitting cable attenuation (dB)	0.0
Additional attenuations(dB)	0.0
Base diagrams sectors (T = All, F = Front)	T
Velocity factor of cables to Antennas (0÷1)	1.00
Coordinate System(C = cartesian, P = polar)	P
Mast side / diameter(cm)	0.0
Mast cross section (T/Q/C)	Q
Structure rotation w.r.t. North (°)	0.0
Mast rotation w.r.t. North (°)	0.0

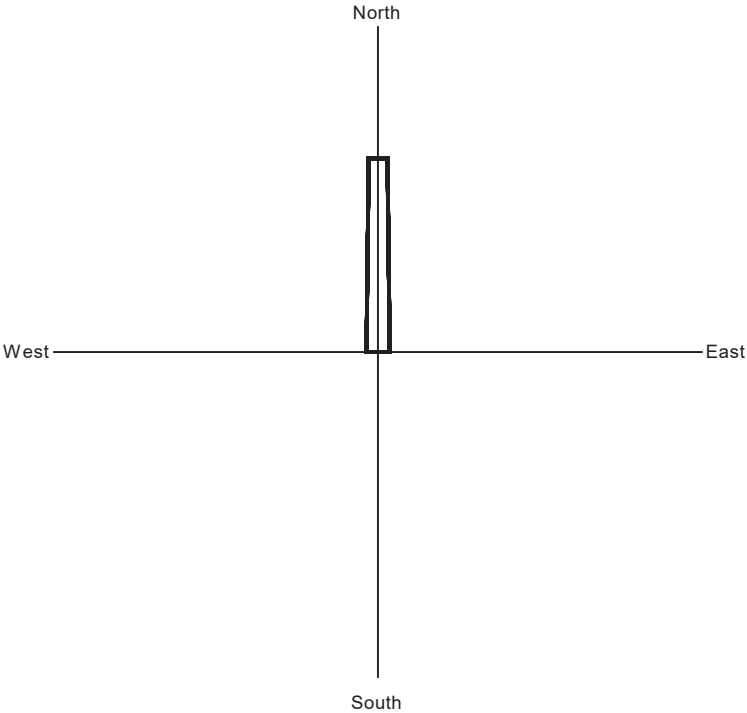
Information about antennas used in the System

	Antenna
Manufacturer	Telecom
Antenna model	
Band start(MHz)	TFLBDI
Band stop(MHz)	87
diagrams Frequency(MHz)	108
Polariz (H/V/C/X)	98.10
Vertical dist (cm)	V
Height (cm)	260
Width (cm)	138
Thickness (cm)	18
Weight (Kg)	150
Maximum power (KW)	9
Gain (dBd)	3.5
North E.C. (cm)	1.29
East E.C. (cm)	0
Return loss (dB)	0
R.C.Phase (°)	0
	0

Geometrical and electrical data of antenna System

	<i>Power</i> (%)	<i>Tilt</i> (°)	<i>Az.</i> (°/N)	<i>Phase</i> (°)	<i>V dist.</i> (m)	<i>Scr-d</i> (cm)	<i>Scr-Az</i> (°/N)	<i>Rot.</i> (1÷4)	<i>Type</i> (1÷2)	<i>L cables</i> (cm)	<i>Car. phase</i> (°)
1	8.333	0	0	0 +0.0	14.30	0.0	0.0	1	1	0.0	0.0
2	8.333	0	0	0 +0.0	11.70	0.0	0.0	1	1	0.0	0.0
3	8.333	0	0	0 +0.0	9.10	0.0	0.0	1	1	0.0	0.0
4	8.333	0	0	0 +0.0	6.50	0.0	0.0	1	1	0.0	0.0
5	8.333	0	0	0 +0.0	3.90	0.0	0.0	1	1	0.0	0.0
6	8.333	0	0	0 +0.0	1.30	0.0	0.0	1	1	0.0	0.0
7	8.333	0	0	0 +0.0	-1.30	0.0	0.0	1	1	0.0	0.0
8	8.333	0	0	0 +0.0	-3.90	0.0	0.0	1	1	0.0	0.0
9	8.333	0	0	0 +0.0	-6.50	0.0	0.0	1	1	0.0	0.0
10	8.333	0	0	0 +0.0	-9.10	0.0	0.0	1	1	0.0	0.0
11	8.333	0	0	0 +0.0	-11.70	0.0	0.0	1	1	0.0	0.0
12	8.333	0	0	0 +0.0	-14.30	0.0	0.0	1	1	0.0	0.0

Plan of antenna system



Side of antenna system



Antennas arrays data

Note: calculation of single antennas arrays data (without taking into account mutual effects)

A. Antennas array azimuth (°/N)	0
B. Number of antennas	12
C. Nominal power supply (W)	1.00
D. Losses (addit. + cables) (dB)	0.0
E. Effective power supply (W)	1.00
F. Theor. maximum gain (dBd)	12.08
G. Distribution losses (dB)	0.00
H. Nominal max gain F - G (dBd)	12.08
I. Compensation losses (dB)	0.06
J. Effec. max gain H - I (dBd)	12.02
K. Effec. max gain (times)	15.93
L. Effec. max power E * K (KW)	0.0159
M. Max power depr. angle (°)	0.0
N. Max power az. angle (°)	28

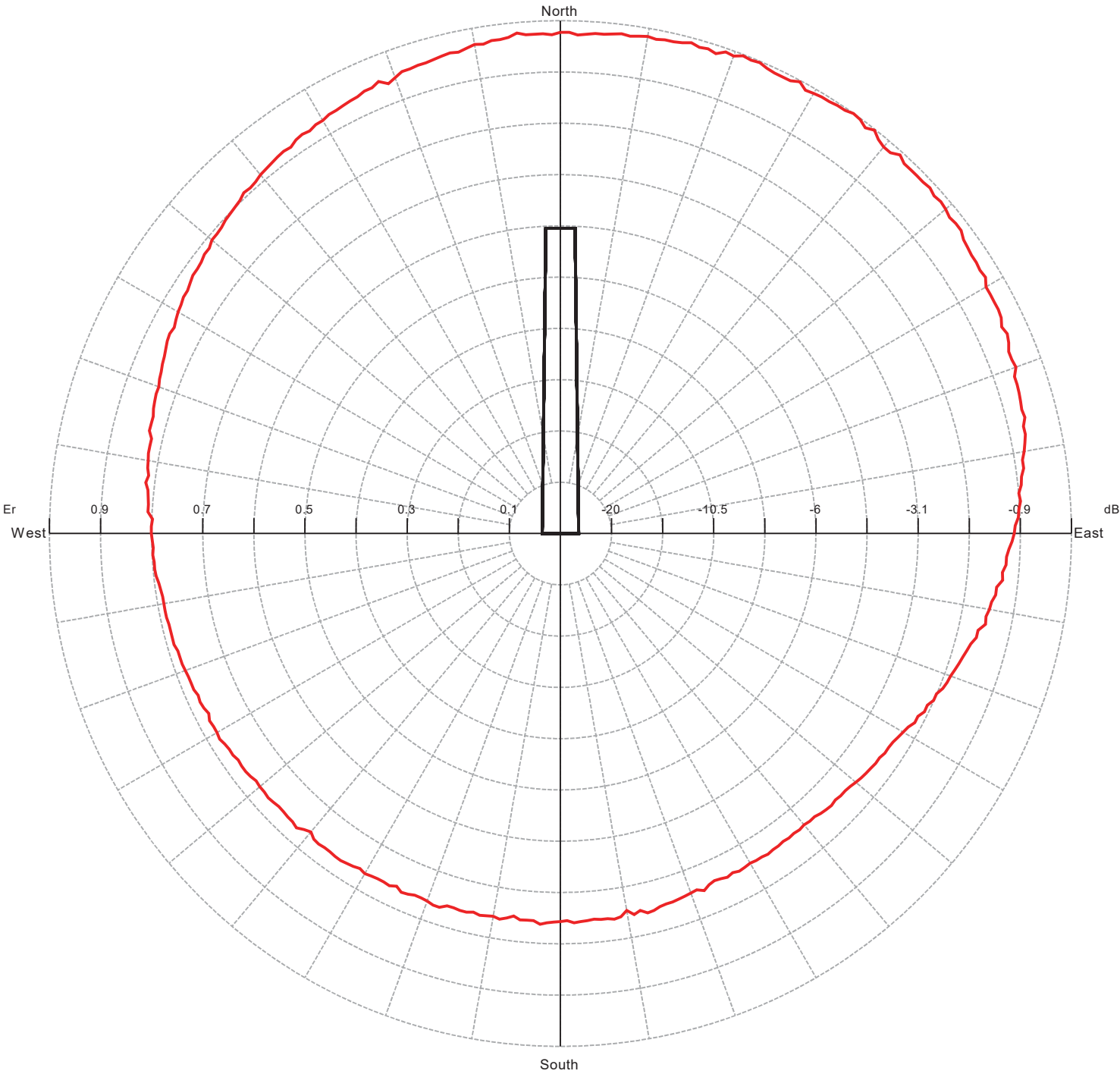
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	-18.2	90	-19.0	180	-20.4	270	-19.9
10	-18.1	100	-19.3	190	-20.4	280	-19.7
20	-18.0	110	-19.8	200	-20.3	290	-19.5
30	-18.0	120	-20.2	210	-20.3	300	-19.2
40	-18.1	130	-20.4	220	-20.3	310	-19.0
50	-18.1	140	-20.6	230	-20.3	320	-18.7
60	-18.3	150	-20.5	240	-20.2	330	-18.6
70	-18.4	160	-20.5	250	-20.1	340	-18.4
80	-18.7	170	-20.5	260	-20.0	350	-18.2

Diagram in dBK calculated at horizon (without -20dB\ 's lower limit vs maximum power)

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	-18.2	90	-19.0	180	-20.4	270	-19.9
10	-18.1	100	-19.3	190	-20.4	280	-19.7
20	-18.0	110	-19.8	200	-20.3	290	-19.5
30	-18.0	120	-20.2	210	-20.3	300	-19.2
40	-18.1	130	-20.4	220	-20.3	310	-19.0
50	-18.1	140	-20.6	230	-20.3	320	-18.7
60	-18.3	150	-20.5	240	-20.2	330	-18.6
70	-18.4	160	-20.5	250	-20.1	340	-18.4
80	-18.7	170	-20.5	260	-20.0	350	-18.2

Horizontal diagram at 0.0° tilt (Total Antenna)



— 0.0° Tilt (Total Antenna), Gain (dBd): 12.04

ERP T.Max(KW): 0.016 ERP E.Max(KW): 0.016

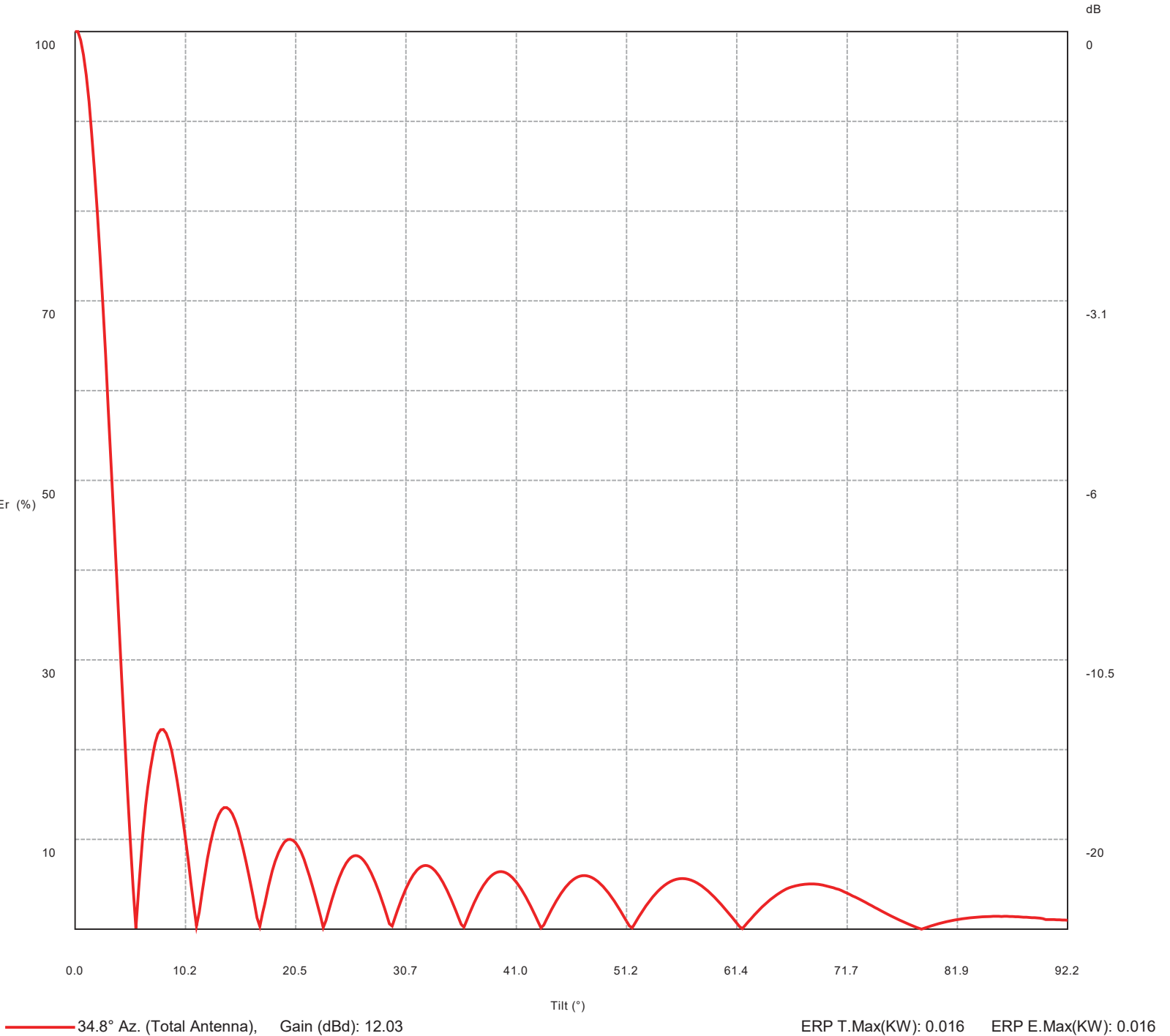
Horizontal diagram at 0.0° tilt (Total Antenna)

Az (°)	Er (%)	ERP (W)	Az (°)	Er (%)	ERP (W)	Az (°)	Er (%)	ERP (W)
0.0	97.7	15.3	60.0	96.2	14.8	120.0	77.4	9.6
1.0	97.7	15.3	61.0	96.2	14.8	121.0	77.1	9.5
2.0	97.3	15.1	62.0	96.2	14.8	122.0	76.7	9.4
3.0	97.5	15.2	63.0	96.2	14.8	123.0	76.6	9.4
4.0	97.7	15.3	64.0	95.9	14.7	124.0	76.6	9.4
5.0	97.7	15.3	65.0	95.3	14.5	125.0	76.2	9.3
6.0	97.9	15.4	66.0	95.7	14.7	126.0	76.2	9.3
7.0	98.2	15.4	67.0	95.3	14.5	127.0	76.1	9.3
8.0	97.9	15.4	68.0	94.6	14.3	128.0	75.9	9.2
9.0	98.2	15.4	69.0	94.6	14.3	129.0	75.7	9.2
10.0	98.4	15.5	70.0	94.8	14.4	130.0	75.5	9.1
11.0	98.2	15.4	71.0	94.0	14.1	131.0	75.1	9.0
12.0	98.4	15.5	72.0	94.0	14.1	132.0	75.0	9.0
13.0	98.4	15.5	73.0	93.9	14.1	133.0	75.0	9.0
14.0	98.6	15.6	74.0	93.6	14.0	134.0	74.8	9.0
15.0	99.1	15.7	75.0	93.4	14.0	135.0	75.0	9.0
16.0	98.6	15.6	76.0	93.6	14.0	136.0	74.8	9.0
17.0	98.9	15.6	77.0	93.0	13.8	137.0	74.7	8.9
18.0	98.4	15.5	78.0	93.0	13.8	138.0	74.3	8.8
19.0	99.3	15.8	79.0	92.6	13.7	139.0	74.3	8.8
20.0	99.1	15.7	80.0	92.2	13.6	140.0	74.2	8.8
21.0	99.8	15.9	81.0	91.5	13.4	141.0	74.3	8.8
22.0	99.5	15.9	82.0	91.5	13.4	142.0	74.2	8.8
23.0	99.8	15.9	83.0	90.9	13.2	143.0	74.3	8.8
24.0	99.3	15.8	84.0	90.7	13.2	144.0	74.2	8.8
25.0	99.1	15.7	85.0	90.1	13.0	145.0	74.4	8.8
26.0	99.1	15.7	86.0	90.3	13.0	146.0	74.4	8.8
27.0	99.1	15.7	87.0	89.8	12.9	147.0	74.5	8.9
28.0	99.8	15.9	88.0	89.6	12.9	148.0	74.4	8.9
29.0	98.9	15.6	89.0	89.0	12.7	149.0	74.4	8.9
30.0	99.1	15.7	90.0	88.8	12.6	150.0	74.2	8.8
31.0	99.3	15.8	91.0	88.4	12.5	151.0	74.4	8.9
32.0	99.3	15.8	92.0	87.8	12.3	152.0	74.6	8.9
33.0	99.5	15.9	93.0	87.4	12.2	153.0	74.2	8.8
34.0	99.5	15.9	94.0	87.4	12.2	154.0	74.6	8.9
35.0	100.0	16.0	95.0	86.8	12.1	155.0	74.2	8.8
36.0	99.8	15.9	96.0	87.0	12.1	156.0	74.1	8.8
37.0	99.1	15.7	97.0	86.0	11.8	157.0	74.4	8.9
38.0	99.8	15.9	98.0	86.0	11.8	158.0	75.1	9.0
39.0	98.9	15.6	99.0	85.4	11.7	159.0	74.4	8.9
40.0	98.4	15.5	100.0	85.2	11.6	160.0	74.6	8.9
41.0	98.4	15.5	101.0	84.8	11.5	161.0	74.8	8.9
42.0	99.3	15.8	102.0	85.0	11.6	162.0	75.0	9.0
43.0	98.6	15.6	103.0	83.9	11.3	163.0	75.1	9.0
44.0	98.6	15.6	104.0	83.9	11.3	164.0	75.1	9.0
45.0	98.6	15.6	105.0	83.1	11.1	165.0	75.3	9.1
46.0	98.6	15.6	106.0	82.7	11.0	166.0	75.7	9.2
47.0	98.9	15.6	107.0	82.4	10.9	167.0	75.9	9.2
48.0	98.4	15.5	108.0	82.0	10.8	168.0	75.1	9.0
49.0	98.6	15.6	109.0	81.6	10.7	169.0	75.7	9.2
50.0	98.4	15.5	110.0	81.2	10.6	170.0	74.6	8.9
51.0	97.9	15.4	111.0	81.1	10.5	171.0	75.7	9.2
52.0	98.2	15.4	112.0	80.7	10.4	172.0	75.9	9.2
53.0	98.2	15.4	113.0	80.0	10.2	173.0	75.7	9.2
54.0	97.5	15.2	114.0	80.0	10.2	174.0	75.7	9.2
55.0	97.3	15.1	115.0	79.2	10.0	175.0	75.5	9.1
56.0	97.1	15.1	116.0	79.2	10.0	176.0	75.7	9.2
57.0	97.1	15.1	117.0	78.5	9.9	177.0	75.8	9.2
58.0	96.8	15.0	118.0	78.5	9.9	178.0	75.9	9.2
59.0	97.1	15.1	119.0	77.8	9.7	179.0	75.5	9.1

Horizontal diagram at 0.0° tilt (Total Antenna)

Az (°)	Er (%)	ERP (W)	Az (°)	Er (%)	ERP (W)	Az (°)	Er (%)	ERP (W)
180.0	75.7	9.2	240.0	77.6	9.6	300.0	86.4	11.9
181.0	75.8	9.2	241.0	77.6	9.6	301.0	86.6	12.0
182.0	75.9	9.2	242.0	77.8	9.7	302.0	87.0	12.1
183.0	76.3	9.3	243.0	77.3	9.6	303.0	87.0	12.1
184.0	75.7	9.2	244.0	77.6	9.6	304.0	87.4	12.2
185.0	75.7	9.2	245.0	77.8	9.7	305.0	87.8	12.3
186.0	75.8	9.2	246.0	77.6	9.6	306.0	87.8	12.3
187.0	75.2	9.0	247.0	78.0	9.7	307.0	88.0	12.4
188.0	75.7	9.2	248.0	77.9	9.7	308.0	88.4	12.5
189.0	76.1	9.3	249.0	77.9	9.7	309.0	88.4	12.5
190.0	75.8	9.2	250.0	78.1	9.8	310.0	89.0	12.7
191.0	75.9	9.2	251.0	78.3	9.8	311.0	89.0	12.7
192.0	76.1	9.3	252.0	78.3	9.8	312.0	89.2	12.7
193.0	75.8	9.2	253.0	78.3	9.8	313.0	89.6	12.9
194.0	76.1	9.3	254.0	78.6	9.9	314.0	89.8	12.9
195.0	76.1	9.3	255.0	78.6	9.9	315.0	90.1	13.0
196.0	75.9	9.2	256.0	78.6	9.9	316.0	90.3	13.0
197.0	75.9	9.2	257.0	78.6	9.9	317.0	90.9	13.2
198.0	76.6	9.4	258.0	78.8	9.9	318.0	90.7	13.2
199.0	76.6	9.4	259.0	78.8	9.9	319.0	90.9	13.2
200.0	76.3	9.3	260.0	78.8	9.9	320.0	91.3	13.3
201.0	76.1	9.3	261.0	78.8	9.9	321.0	91.5	13.4
202.0	76.1	9.3	262.0	79.0	10.0	322.0	91.7	13.5
203.0	76.4	9.3	263.0	79.2	10.0	323.0	91.9	13.5
204.0	76.6	9.4	264.0	79.5	10.1	324.0	92.2	13.6
205.0	75.9	9.2	265.0	79.7	10.2	325.0	91.9	13.5
206.0	76.4	9.3	266.0	79.7	10.2	326.0	92.6	13.7
207.0	76.2	9.3	267.0	79.9	10.2	327.0	92.8	13.8
208.0	76.2	9.3	268.0	79.7	10.2	328.0	92.6	13.7
209.0	76.4	9.3	269.0	79.9	10.2	329.0	93.0	13.8
210.0	76.6	9.4	270.0	80.1	10.3	330.0	93.0	13.8
211.0	76.2	9.3	271.0	80.1	10.3	331.0	93.4	14.0
212.0	76.5	9.4	272.0	79.9	10.2	332.0	93.4	14.0
213.0	76.7	9.4	273.0	80.8	10.5	333.0	93.6	14.0
214.0	76.9	9.5	274.0	80.8	10.5	334.0	93.9	14.1
215.0	76.9	9.5	275.0	81.0	10.5	335.0	94.0	14.1
216.0	76.7	9.4	276.0	81.2	10.5	336.0	94.4	14.3
217.0	76.7	9.4	277.0	81.8	10.7	337.0	94.4	14.3
218.0	76.9	9.5	278.0	81.4	10.6	338.0	95.1	14.5
219.0	76.7	9.4	279.0	81.8	10.7	339.0	94.0	14.1
220.0	76.0	9.2	280.0	81.9	10.7	340.0	94.6	14.3
221.0	76.5	9.4	281.0	82.1	10.8	341.0	95.3	14.5
222.0	77.2	9.5	282.0	82.1	10.8	342.0	95.3	14.5
223.0	76.8	9.4	283.0	82.1	10.8	343.0	95.5	14.6
224.0	76.8	9.4	284.0	82.9	11.0	344.0	95.5	14.6
225.0	76.6	9.4	285.0	82.9	11.0	345.0	95.7	14.7
226.0	76.6	9.4	286.0	82.9	11.0	346.0	95.9	14.7
227.0	76.8	9.4	287.0	83.3	11.1	347.0	96.2	14.8
228.0	77.0	9.5	288.0	83.5	11.1	348.0	95.9	14.7
229.0	76.8	9.4	289.0	83.7	11.2	349.0	96.4	14.9
230.0	76.8	9.4	290.0	83.7	11.2	350.0	96.8	15.0
231.0	76.6	9.4	291.0	84.0	11.3	351.0	96.6	14.9
232.0	77.0	9.5	292.0	84.2	11.4	352.0	97.1	15.1
233.0	77.1	9.5	293.0	84.6	11.5	353.0	97.1	15.1
234.0	77.1	9.5	294.0	84.8	11.5	354.0	97.3	15.1
235.0	76.9	9.5	295.0	85.2	11.6	355.0	97.9	15.4
236.0	77.3	9.6	296.0	85.6	11.7	356.0	97.5	15.2
237.0	77.3	9.6	297.0	85.8	11.8	357.0	97.5	15.2
238.0	77.5	9.6	298.0	85.6	11.7	358.0	97.5	15.2
239.0	77.8	9.7	299.0	86.0	11.8	359.0	97.3	15.1

Vertical diagram at an azimuth of 34.8°



Vertical diagram at an azimuth of 34.8°

Dep (°)	Er (%)	ERP (W)	Dep (°)	Er (%)	ERP (W)	Dep (°)	Er (%)	ERP (W)
0.0	100.3	16.0	15.4	10.1	0.2	30.7	4.5	0.0
0.3	100.0	15.9	15.6	8.9	0.1	31.0	5.2	0.0
0.5	99.0	15.6	15.9	7.5	0.1	31.2	5.7	0.1
0.8	97.4	15.1	16.1	6.0	0.1	31.5	6.2	0.1
1.0	95.1	14.4	16.4	4.4	0.0	31.7	6.6	0.1
1.3	92.2	13.5	16.6	2.9	0.0	32.0	6.9	0.1
1.5	88.7	12.5	16.9	1.3	0.0	32.3	7.0	0.1
1.8	84.6	11.4	17.2	0.3	0.0	32.5	7.1	0.1
2.0	80.1	10.2	17.4	1.8	0.0	32.8	7.1	0.1
2.3	75.1	8.9	17.7	3.3	0.0	33.0	6.9	0.1
2.6	69.7	7.7	17.9	4.6	0.0	33.3	6.7	0.1
2.8	64.0	6.5	18.2	5.9	0.1	33.5	6.3	0.1
3.1	58.1	5.4	18.4	7.0	0.1	33.8	5.9	0.1
3.3	52.0	4.3	18.7	7.9	0.1	34.0	5.4	0.0
3.6	45.8	3.3	18.9	8.7	0.1	34.3	4.9	0.0
3.8	39.5	2.5	19.2	9.3	0.1	34.6	4.2	0.0
4.1	33.3	1.8	19.5	9.7	0.2	34.8	3.6	0.0
4.4	27.1	1.2	19.7	10.0	0.2	35.1	2.9	0.0
4.6	21.1	0.7	20.0	10.0	0.2	35.3	2.1	0.0
4.9	15.4	0.4	20.2	9.9	0.2	35.6	1.3	0.0
5.1	9.9	0.2	20.5	9.6	0.1	35.8	0.6	0.0
5.4	4.7	0.0	20.7	9.2	0.1	36.1	0.2	0.0
5.6	0.1	0.0	21.0	8.5	0.1	36.4	1.0	0.0
5.9	4.5	0.0	21.2	7.8	0.1	36.6	1.7	0.0
6.1	8.5	0.1	21.5	6.9	0.1	36.9	2.5	0.0
6.4	11.9	0.2	21.8	5.9	0.1	37.1	3.1	0.0
6.7	14.9	0.4	22.0	4.9	0.0	37.4	3.8	0.0
6.9	17.4	0.5	22.3	3.7	0.0	37.6	4.3	0.0
7.2	19.3	0.6	22.5	2.6	0.0	37.9	4.8	0.0
7.4	20.8	0.7	22.8	1.4	0.0	38.1	5.3	0.0
7.7	21.7	0.8	23.0	0.2	0.0	38.4	5.7	0.1
7.9	22.2	0.8	23.3	1.0	0.0	38.7	6.0	0.1
8.2	22.2	0.8	23.6	2.1	0.0	38.9	6.2	0.1
8.4	21.8	0.8	23.8	3.2	0.0	39.2	6.4	0.1
8.7	21.0	0.7	24.1	4.2	0.0	39.4	6.4	0.1
9.0	19.8	0.6	24.3	5.1	0.0	39.7	6.4	0.1
9.2	18.3	0.5	24.6	5.9	0.1	39.9	6.3	0.1
9.5	16.6	0.4	24.8	6.6	0.1	40.2	6.1	0.1
9.7	14.6	0.3	25.1	7.2	0.1	40.4	5.9	0.1
10.0	12.4	0.2	25.3	7.7	0.1	40.7	5.6	0.1
10.2	10.0	0.2	25.6	8.0	0.1	41.0	5.3	0.0
10.5	7.6	0.1	25.9	8.2	0.1	41.2	4.8	0.0
10.8	5.2	0.0	26.1	8.2	0.1	41.5	4.4	0.0
11.0	2.8	0.0	26.4	8.1	0.1	41.7	3.8	0.0
11.3	0.4	0.0	26.6	7.9	0.1	42.0	3.3	0.0
11.5	1.9	0.0	26.9	7.5	0.1	42.2	2.7	0.0
11.8	4.1	0.0	27.1	7.1	0.1	42.5	2.1	0.0
12.0	6.1	0.1	27.4	6.5	0.1	42.8	1.4	0.0
12.3	7.9	0.1	27.6	5.8	0.1	43.0	0.8	0.0
12.5	9.5	0.1	27.9	5.1	0.0	43.3	0.1	0.0
12.8	10.8	0.2	28.2	4.3	0.0	43.5	0.5	0.0
13.1	11.9	0.2	28.4	3.4	0.0	43.8	1.1	0.0
13.3	12.7	0.3	28.7	2.5	0.0	44.0	1.7	0.0
13.6	13.3	0.3	28.9	1.5	0.0	44.3	2.3	0.0
13.8	13.6	0.3	29.2	0.6	0.0	44.5	2.9	0.0
14.1	13.6	0.3	29.4	0.3	0.0	44.8	3.4	0.0
14.3	13.3	0.3	29.7	1.3	0.0	45.1	3.9	0.0
14.6	12.8	0.3	30.0	2.2	0.0	45.3	4.3	0.0
14.8	12.1	0.2	30.2	3.0	0.0	45.6	4.7	0.0
15.1	11.2	0.2	30.5	3.8	0.0	45.8	5.1	0.0

Vertical diagram at an azimuth of 34.8°

Dep (°)	Er (%)	ERP (W)	Dep (°)	Er (%)	ERP (W)	Dep (°)	Er (%)	ERP (W)
46.1	5.4	0.0	61.4	0.7	0.0	76.8	0.9	0.0
46.3	5.6	0.0	61.7	0.3	0.0	77.1	0.7	0.0
46.6	5.8	0.1	62.0	0.1	0.0	77.3	0.6	0.0
46.8	5.9	0.1	62.2	0.4	0.0	77.6	0.5	0.0
47.1	6.0	0.1	62.5	0.8	0.0	77.8	0.3	0.0
47.4	6.0	0.1	62.7	1.1	0.0	78.1	0.2	0.0
47.6	5.9	0.1	63.0	1.5	0.0	78.3	0.1	0.0
47.9	5.8	0.1	63.2	1.8	0.0	78.6	0.0	0.0
48.1	5.7	0.1	63.5	2.1	0.0	78.8	0.1	0.0
48.4	5.5	0.0	63.7	2.4	0.0	79.1	0.2	0.0
48.6	5.2	0.0	64.0	2.7	0.0	79.4	0.3	0.0
48.9	4.9	0.0	64.3	3.0	0.0	79.6	0.4	0.0
49.2	4.6	0.0	64.5	3.3	0.0	79.9	0.5	0.0
49.4	4.2	0.0	64.8	3.5	0.0	80.1	0.6	0.0
49.7	3.8	0.0	65.0	3.7	0.0	80.4	0.7	0.0
49.9	3.4	0.0	65.3	4.0	0.0	80.6	0.8	0.0
50.2	2.9	0.0	65.5	4.1	0.0	80.9	0.8	0.0
50.4	2.4	0.0	65.8	4.3	0.0	81.2	0.9	0.0
50.7	1.9	0.0	66.0	4.5	0.0	81.4	1.0	0.0
50.9	1.4	0.0	66.3	4.6	0.0	81.7	1.0	0.0
51.2	0.9	0.0	66.6	4.7	0.0	81.9	1.1	0.0
51.5	0.4	0.0	66.8	4.8	0.0	82.2	1.1	0.0
51.7	0.1	0.0	67.1	4.9	0.0	82.4	1.2	0.0
52.0	0.7	0.0	67.3	4.9	0.0	82.7	1.2	0.0
52.2	1.2	0.0	67.6	5.0	0.0	82.9	1.3	0.0
52.5	1.6	0.0	67.8	5.0	0.0	83.2	1.3	0.0
52.7	2.1	0.0	68.1	5.0	0.0	83.5	1.3	0.0
53.0	2.6	0.0	68.4	5.0	0.0	83.7	1.3	0.0
53.2	3.0	0.0	68.6	5.0	0.0	84.0	1.4	0.0
53.5	3.4	0.0	68.9	5.0	0.0	84.2	1.4	0.0
53.8	3.8	0.0	69.1	5.0	0.0	84.5	1.4	0.0
54.0	4.1	0.0	69.4	4.9	0.0	84.7	1.4	0.0
54.3	4.4	0.0	69.6	4.9	0.0	85.0	1.4	0.0
54.5	4.7	0.0	69.9	4.8	0.0	85.2	1.4	0.0
54.8	5.0	0.0	70.1	4.7	0.0	85.5	1.4	0.0
55.0	5.2	0.0	70.4	4.6	0.0	85.8	1.4	0.0
55.3	5.3	0.0	70.7	4.5	0.0	86.0	1.4	0.0
55.6	5.5	0.0	70.9	4.4	0.0	86.3	1.4	0.0
55.8	5.6	0.0	71.2	4.3	0.0	86.5	1.4	0.0
56.1	5.6	0.1	71.4	4.2	0.0	86.8	1.4	0.0
56.3	5.6	0.1	71.7	4.0	0.0	87.0	1.4	0.0
56.6	5.6	0.1	71.9	3.9	0.0	87.3	1.4	0.0
56.8	5.6	0.0	72.2	3.7	0.0	87.6	1.4	0.0
57.1	5.5	0.0	72.4	3.6	0.0	87.8	1.4	0.0
57.3	5.4	0.0	72.7	3.4	0.0	88.1	1.3	0.0
57.6	5.3	0.0	73.0	3.3	0.0	88.3	1.3	0.0
57.9	5.1	0.0	73.2	3.1	0.0	88.6	1.3	0.0
58.1	4.9	0.0	73.5	2.9	0.0	88.8	1.3	0.0
58.4	4.7	0.0	73.7	2.8	0.0	89.1	1.3	0.0
58.6	4.4	0.0	74.0	2.6	0.0	89.3	1.3	0.0
58.9	4.1	0.0	74.2	2.4	0.0	89.6	1.2	0.0
59.1	3.8	0.0	74.5	2.3	0.0	89.9	1.2	0.0
59.4	3.5	0.0	74.8	2.1	0.0	90.1	1.1	0.0
59.6	3.2	0.0	75.0	1.9	0.0	90.4	1.1	0.0
59.9	2.9	0.0	75.3	1.8	0.0	90.6	1.1	0.0
60.2	2.5	0.0	75.5	1.6	0.0	90.9	1.1	0.0
60.4	2.1	0.0	75.8	1.5	0.0	91.1	1.1	0.0
60.7	1.8	0.0	76.0	1.3	0.0	91.4	1.0	0.0
60.9	1.4	0.0	76.3	1.2	0.0	91.6	1.0	0.0
61.2	1.0	0.0	76.5	1.0	0.0	91.9	1.0	0.0