

TX station: 4xAkl5

Gain solid integration : enabled

Site Name: Labelitaly

**General data of Antenna System**

TX station	4xAkl5
Site Name	Labelitaly
System of coordinates	Geographic
Longitude	00°00'00.000"
Latitude	00°00'00.000"
Ground level a.s.l. (m)	100.0
Antenna system height (m)	50.0
Transmitter power(Watt)	1000.000
Carrier wave frequency (MHz)	98.000
Antenna system central frequency (MHz)	98.000
Antenna base diagrams type 1	LABEL ITALY-AKL_5 LOG 5 ELEM. FM WB
Antenna base diagrams type 2	-
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)	0.88
Coordinate System(C = cartesian, P = polar)	P
Mast side / diameter(cm):	10.0
Mast cross section (T/Q/C)	C
Structure rotation w.r.t. North (°)	0.0
Mast rotation w.r.t. North (°)	0.0

**Information about antennas used in the System**

	<i>Antenna type 1</i>
Manufacturer	LABEL ITALY
Antenna model	AKL_5 LOG 5 ELEM.
Band start(MHz)	88
Band stop(MHz)	108
diagrams Frequency(MHz)	98
Polariz (H,V,C,X)	V
Vertical dist (cm)	260
Height (cm)	173
Width (cm)	6
Thickness (cm)	143
Weight (Kg)	4.5
Maximum power (KW)	2
Gain (dBd)	6.2
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	20
R.C.Phase (°)	0

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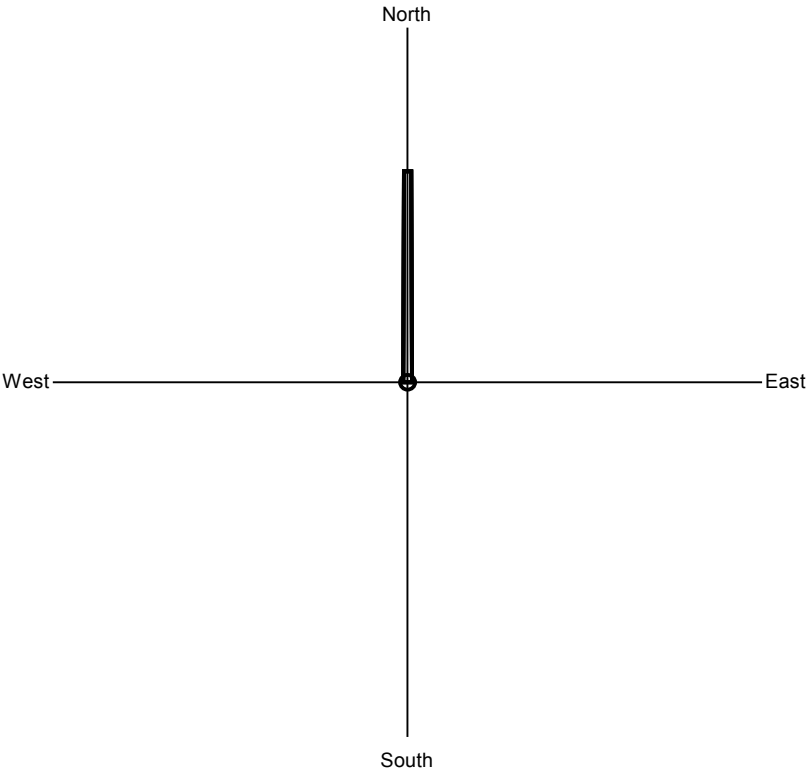
Geometr. and electrical data of Antenna System

	<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	25.000	0	0	0 +0.0	3.90	0.0	0.0	1	1	0.0	0.0
2	25.000	0	0	0 +0.0	1.30	0.0	0.0	1	1	0.0	0.0
3	25.000	0	0	0 +0.0	-1.30	0.0	0.0	1	1	0.0	0.0
4	25.000	0	0	0 +0.0	-3.90	0.0	0.0	1	1	0.0	0.0

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Plan of antenna system



Side of antenna system



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Antennas arrays data

A. Antennas array azimuth (°/N)	0
B. Number of antennas	4
C. Nominal power supply (W)	1000.00
D. Losses (addit. + cables) (dB)	0.0
E. Effective power supply (W)	1000.00
F. Theor. maximum gain (dBd)	11.40
G. Distribution losses (dB)	0.00
H. Nominal max gain [F - G] (dBd)	11.40
I. Compensation losses (dB)	0.00
J. Effec. max gain [H - I] (dBd)	11.40
K. Effec. max gain (times)	13.81
L. Effec. max power [E * K] (KW)	13.8145
M. Max power depr. angle (°)	0.0
N. Max power az. angle (°)	0

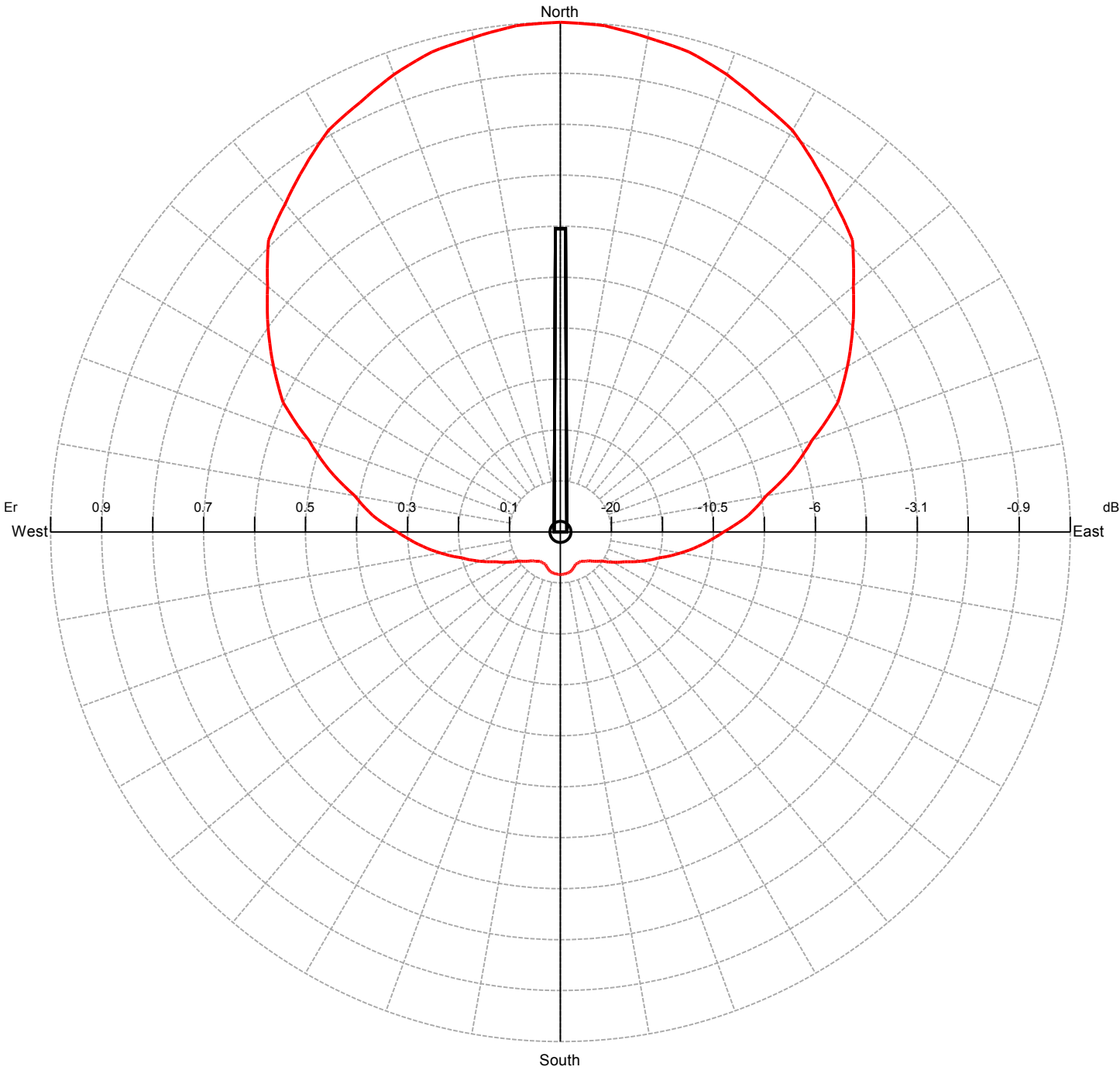
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	11.4	90	1.5	180	-8.6	270	1.5
10	11.3	100	-1.0	190	-8.6	280	3.7
20	11.0	110	-4.1	200	-8.6	290	5.8
30	10.6	120	-7.1	210	-8.6	300	7.7
40	9.9	130	-8.6	220	-8.6	310	8.9
50	8.9	140	-8.6	230	-8.6	320	9.9
60	7.7	150	-8.6	240	-7.1	330	10.6
70	5.8	160	-8.6	250	-4.1	340	11.0
80	3.7	170	-8.6	260	-1.0	350	11.3

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Horizontal diagram at 0.0° depres. (Total Antenna)

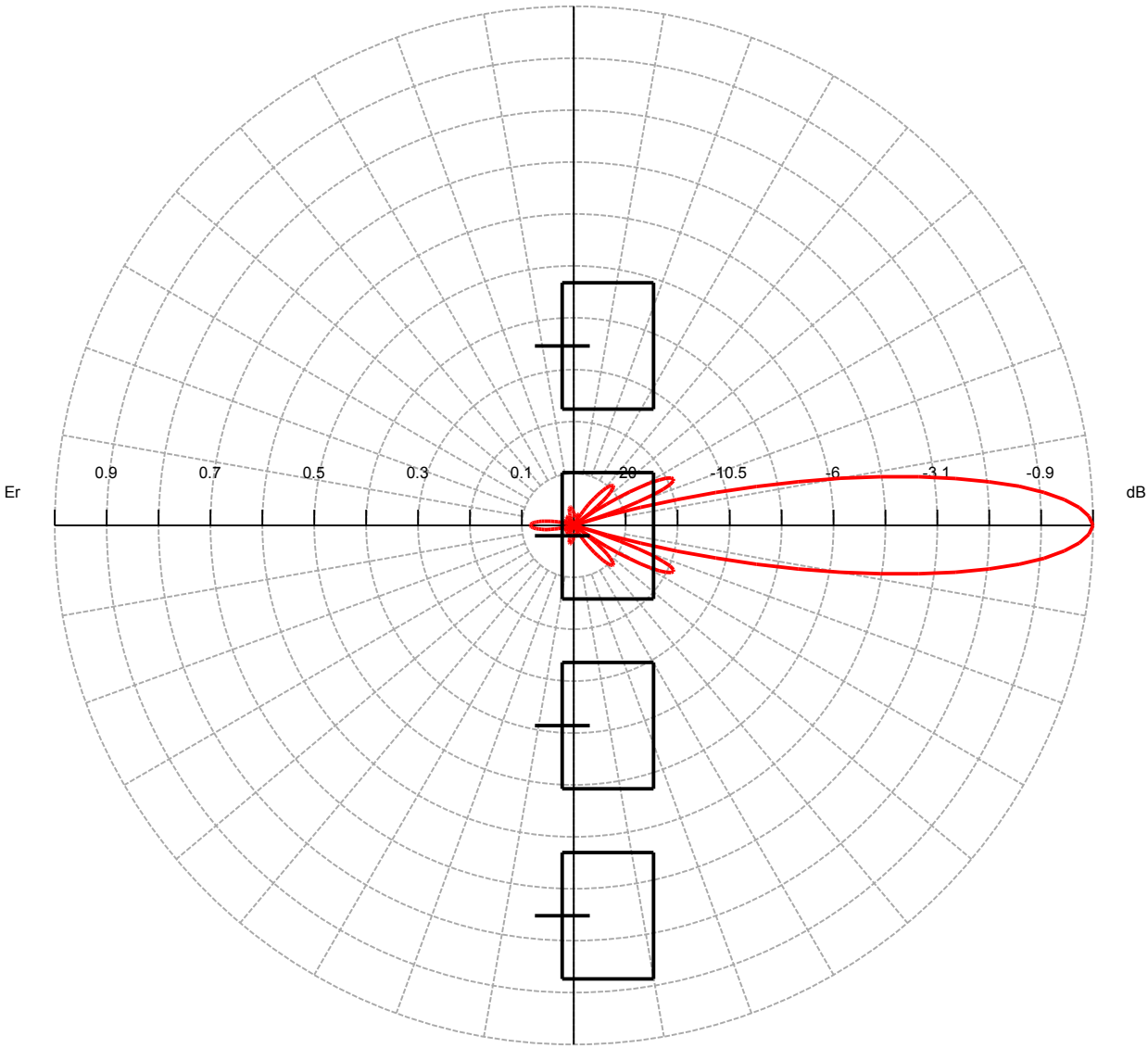


0.0° depres. (Total Antenna), Gain (dBd): 11.4 ERP T.Max(KW): 13.8145 ERP E.Max(KW): 13.8145

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 11.4

ERP T.Max(KW): 13.8145    ERP E.Max(KW): 13.8145