

TX station: 8xAkl5

Gain solid integration : enabled

Site Name: Labelitaly

**General data of Antenna System**

TX station	8xAkl5
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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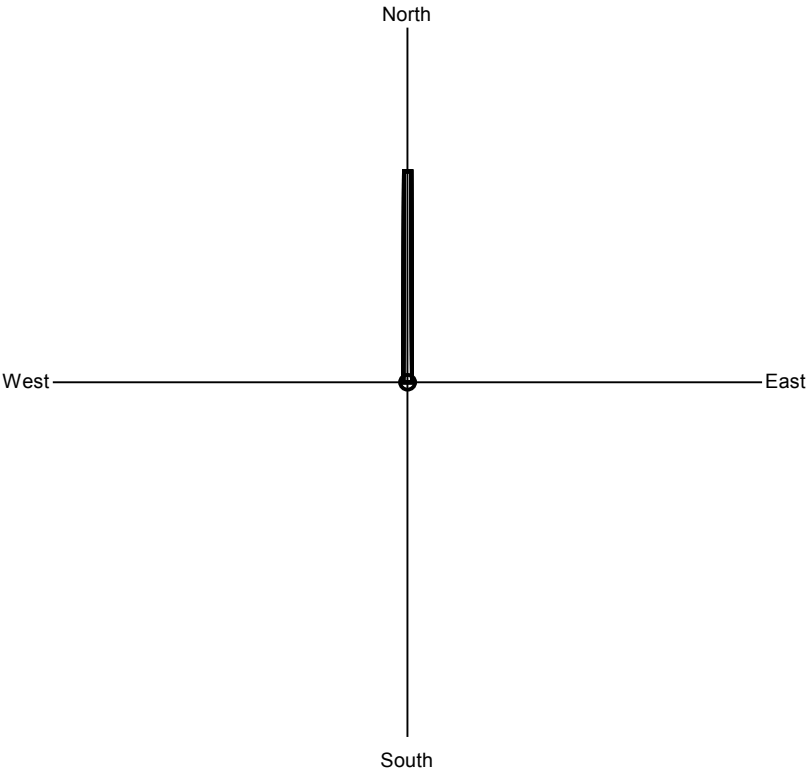
Geometr. and electrical data of Antenna System

	<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	12.500	0	0	0 +0.0	9.10	0.0	0.0	1	1	0.0	0.0
2	12.500	0	0	0 +0.0	6.50	0.0	0.0	1	1	0.0	0.0
3	12.500	0	0	0 +0.0	3.90	0.0	0.0	1	1	0.0	0.0
4	12.500	0	0	0 +0.0	1.30	0.0	0.0	1	1	0.0	0.0
5	12.500	0	0	0 +0.0	-1.30	0.0	0.0	1	1	0.0	0.0
6	12.500	0	0	0 +0.0	-3.90	0.0	0.0	1	1	0.0	0.0
7	12.500	0	0	0 +0.0	-6.50	0.0	0.0	1	1	0.0	0.0
8	12.500	0	0	0 +0.0	-9.10	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	8
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)	14.33
G. Distribution losses (dB)	0.00
H. Nominal max gain [F - G] (dBd)	14.33
I. Compensation losses (dB)	0.00
J. Effec. max gain [H - I] (dBd)	14.33
K. Effec. max gain (times)	27.10
L. Effec. max power [E * K] (KW)	27.0980
M. Max power depr. angle (°)	0.0
N. Max power az. angle (°)	0

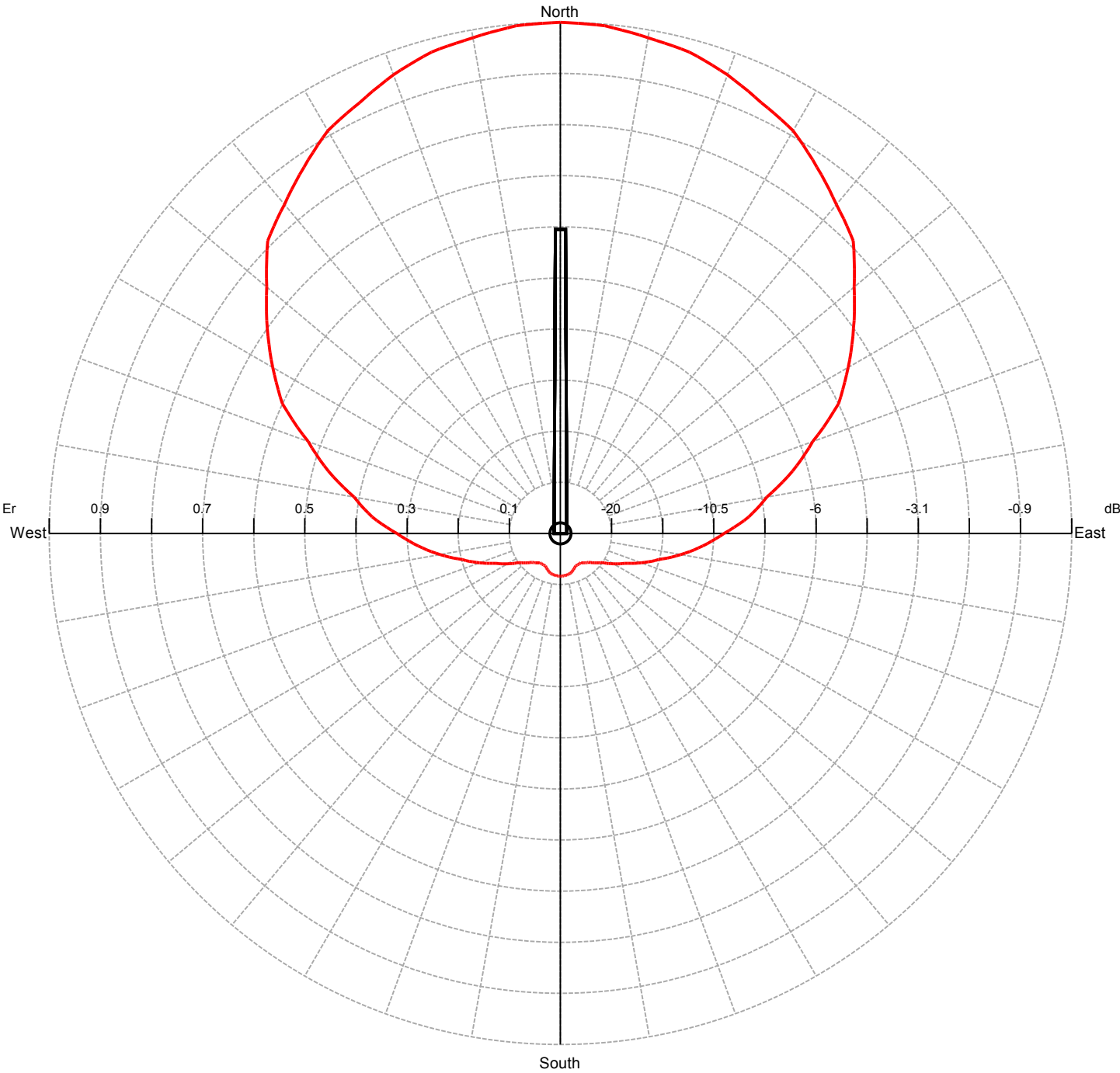
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	14.3	90	4.4	180	-5.7	270	4.4
10	14.2	100	1.9	190	-5.7	280	6.6
20	13.9	110	-1.2	200	-5.7	290	8.7
30	13.5	120	-4.2	210	-5.7	300	10.6
40	12.8	130	-5.7	220	-5.7	310	11.8
50	11.8	140	-5.7	230	-5.7	320	12.8
60	10.6	150	-5.7	240	-4.2	330	13.5
70	8.7	160	-5.7	250	-1.2	340	13.9
80	6.6	170	-5.7	260	1.9	350	14.2

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Horizontal diagram at 0.0° depres. (Total Antenna)

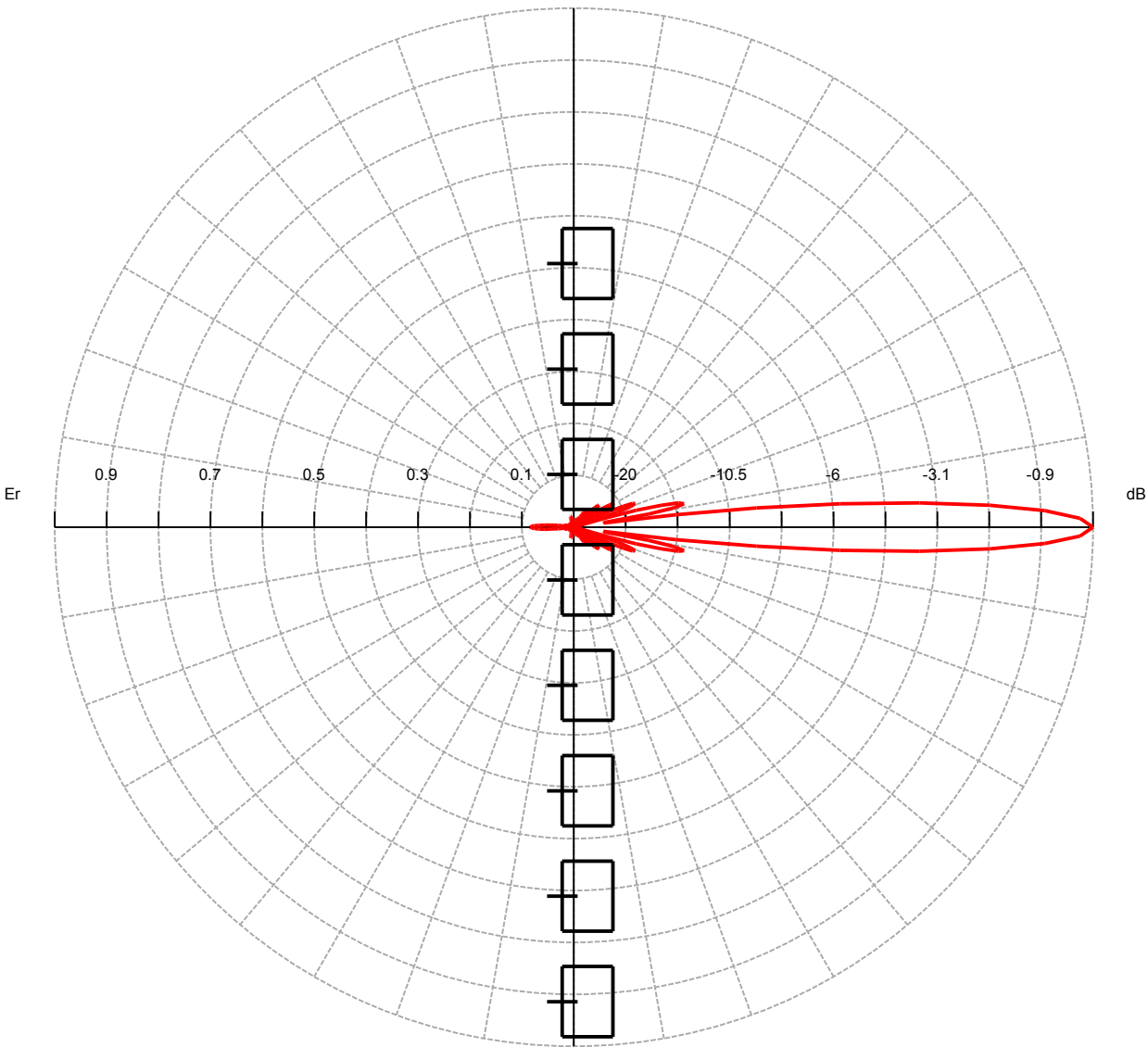


0.0° depres. (Total Antenna), Gain (dBd): 14.33 ERP T.Max(KW): 27.098 ERP E.Max(KW): 27.098

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 14.33

ERP T.Max(KW): 27.098    ERP E.Max(KW): 27.098