

TX station: 4xEky3

Gain solid integration : enabled

Site Name: Labelitaly

General data of Antenna System

TX station	4xEky3
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)	128.000
Antenna system central frequency (MHz)	128.000
Antenna base diagrams type 1	LABEL ITALY-EKY_3 AERONAUTICAL 3 EL YAGI
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):	50.0
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

	<i>Antenna type 1</i>
Manufacturer	LABEL ITALY
Antenna model	EKY_3 AERONAUTICAL
Band start(MHz)	118
Band stop(MHz)	144
diagrams Frequency(MHz)	128
Polariz (H,V,C,X)	V
Vertical dist (cm)	190
Height (cm)	138
Width (cm)	6
Thickness (cm)	104
Weight (Kg)	6
Maximum power (KW)	2
Gain (dBd)	5
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	20
R.C.Phase (°)	0

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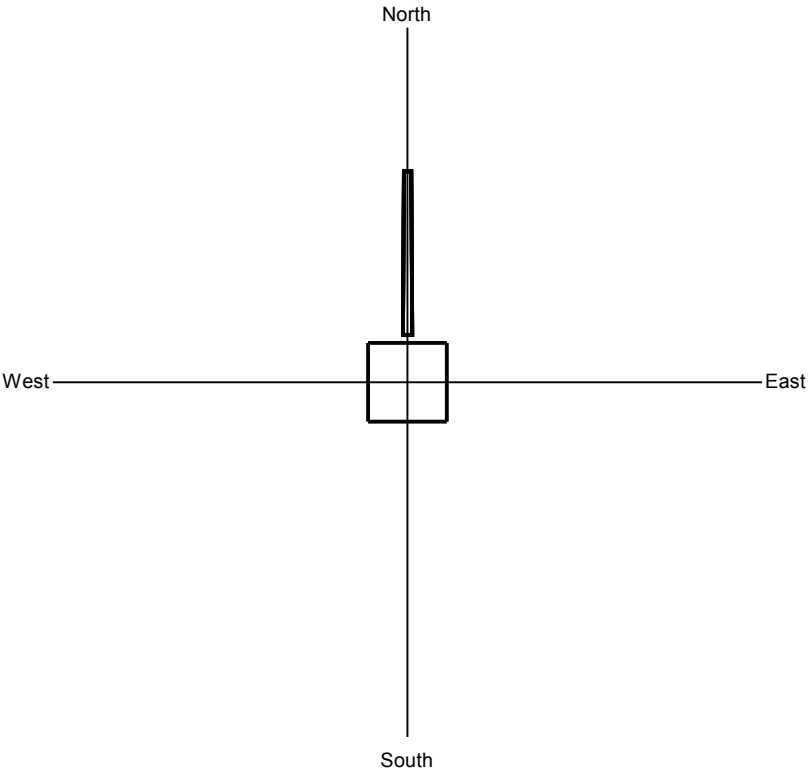
Geometr. and electrical data of Antenna System

	<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	3.30	30.0	0.0	1	1	0.0	0.0
2	25.000	0	0	0 +0.0	1.10	30.0	0.0	1	1	0.0	0.0
3	25.000	0	0	0 +0.0	-1.10	30.0	0.0	1	1	0.0	0.0
4	25.000	0	0	0 +0.0	-3.30	30.0	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)	10.54
G. Distribution losses (dB)	0.00
H. Nominal max gain [F - G] (dBd)	10.54
I. Compensation losses (dB)	0.00
J. Effec. max gain [H - I] (dBd)	10.54
K. Effec. max gain (times)	11.31
L. Effec. max power [E * K] (KW)	11.3118
M. Max power depr. angle (°)	0.0
N. Max power az. angle (°)	0

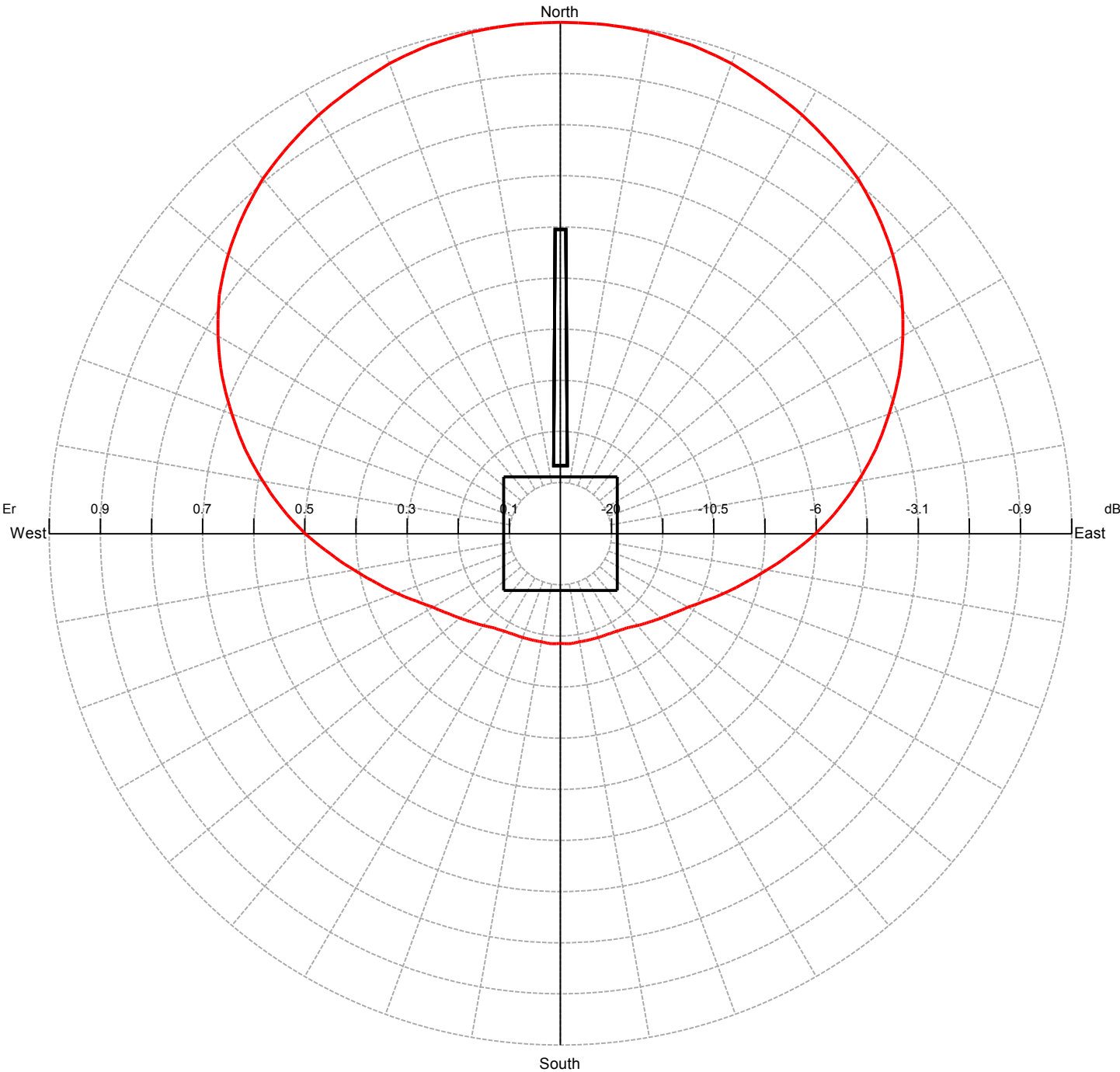
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	10.5	90	4.5	180	-2.8	270	4.5
10	10.5	100	2.8	190	-2.8	280	6.0
20	10.3	110	1.2	200	-2.8	290	7.2
30	10.1	120	-0.3	210	-2.6	300	8.3
40	9.7	130	-1.3	220	-2.1	310	9.1
50	9.1	140	-2.1	230	-1.3	320	9.7
60	8.3	150	-2.6	240	-0.3	330	10.1
70	7.2	160	-2.8	250	1.2	340	10.3
80	6.0	170	-2.8	260	2.8	350	10.5

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Horizontal diagram at 0.0° depres. (Total Antenna)



0.0° depres. (Total Antenna), Gain (dBd): 10.54 ERP T.Max(KW): 11.3118 ERP E.Max(KW): 11.3118

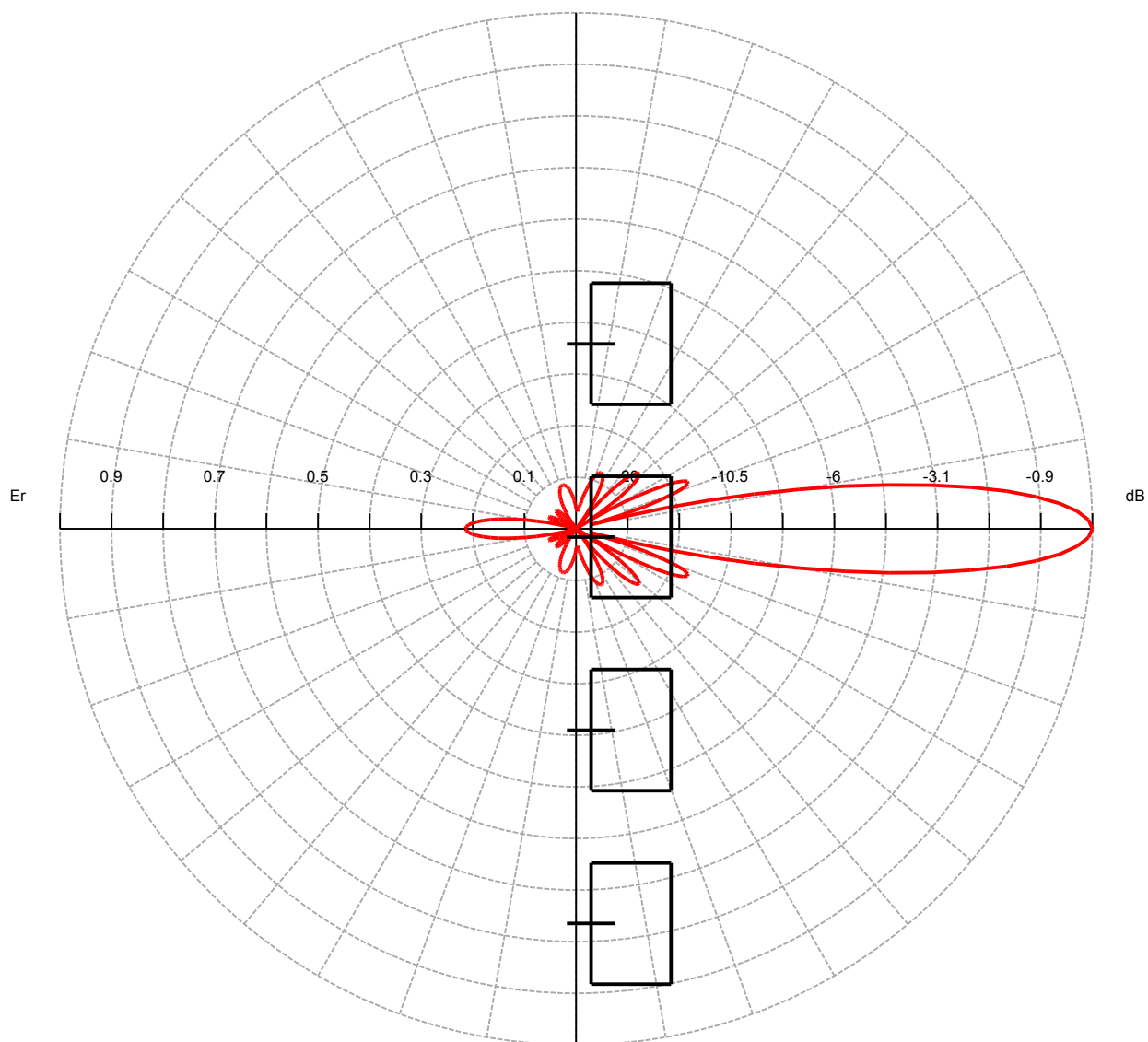
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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 10.54

ERP T.Max(KW): 11.3118 ERP E.Max(KW): 11.3118