

TX station: 16xUkk8-h\_omni

Gain solid integration : enabled

Site Name: Labelitaly

**General data of Antenna System**

TX station	16xUkk8-h_omni
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)	600.000
Antenna system central frequency (MHz)	600.000
Antenna base diagrams type 1	LABEL ITALY-UKK_8 PANEL 4 DIP UHF
Antenna base diagrams type 2	-
Polarization (H/V/C/X)	H
Transmitting cable attenuation (dB)	0.3
Additional attenuations(dB)	0.2
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):	40.0
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	UKK_8 PANEL 4 DIP
Band start(MHz)	470
Band stop(MHz)	850
diagrams Frequency(MHz)	610
Polariz (H,V,C,X)	H
Vertical dist (cm)	105
Height (cm)	100
Width (cm)	45
Thickness (cm)	24
Weight (Kg)	0
Maximum power (KW)	2
Gain (dBd)	11
North E.C. (cm)	6.5
East E.C. (cm)	0.8
Return loss (dB)	0
R.C.Phase (°)	0

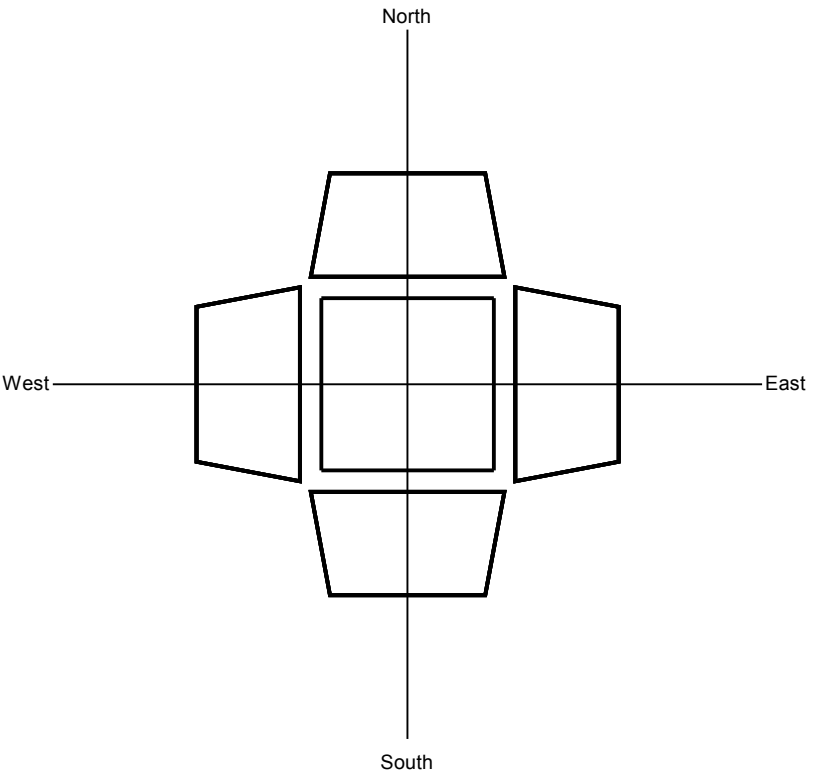
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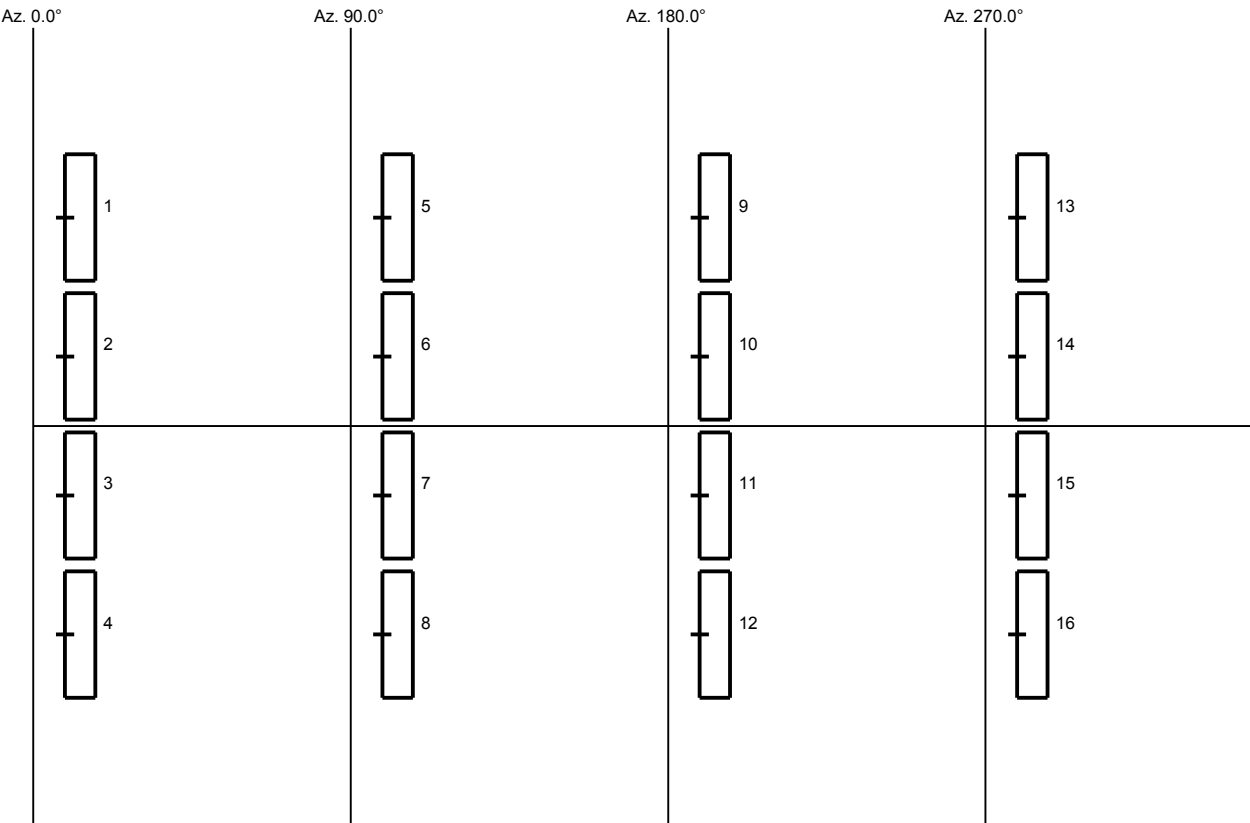
Geometr. and electrical data of Antenna System

	<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	6.250	0	0	0	+0.0	1.65	25.0	0.0	1	1	300.0	0.0
2	6.250	0	0	0	+0.0	0.55	25.0	0.0	1	1	300.0	0.0
3	6.250	0	0	0	+0.0	-0.55	25.0	0.0	1	1	300.0	0.0
4	6.250	0	0	0	+0.0	-1.65	25.0	0.0	1	1	300.0	0.0
5	6.250	0	90	0	+0.0	1.65	25.0	90.0	1	1	300.0	0.0
6	6.250	0	90	0	+0.0	0.55	25.0	90.0	1	1	300.0	0.0
7	6.250	0	90	0	+0.0	-0.55	25.0	90.0	1	1	300.0	0.0
8	6.250	0	90	0	+0.0	-1.65	25.0	90.0	1	1	300.0	0.0
9	6.250	0	180	0	+0.0	1.65	25.0	180.0	1	1	300.0	0.0
10	6.250	0	180	0	+0.0	0.55	25.0	180.0	1	1	300.0	0.0
11	6.250	0	180	0	+0.0	-0.55	25.0	180.0	1	1	300.0	0.0
12	6.250	0	180	0	+0.0	-1.65	25.0	180.0	1	1	300.0	0.0
13	6.250	0	270	0	+0.0	1.65	25.0	270.0	1	1	300.0	0.0
14	6.250	0	270	0	+0.0	0.55	25.0	270.0	1	1	300.0	0.0
15	6.250	0	270	0	+0.0	-0.55	25.0	270.0	1	1	300.0	0.0
16	6.250	0	270	0	+0.0	-1.65	25.0	270.0	1	1	300.0	0.0

Plan of antenna system



Side of antenna system



Antennas arrays data

A. Antennas array azimuth (°/N)	0	90	180	270
B. Number of antennas	4	4	4	4
C. Nominal power supply (W)	250.00	250.00	250.00	250.00
D. Losses (addit. + cables) (dB)	0.5	0.5	0.5	0.5
E. Effective power supply (W)	222.81	222.81	222.81	222.81
F. Theor. maximum gain (dBd)	16.79	16.79	16.79	16.79
G. Distribution losses (dB)	0.00	0.00	0.00	0.00
H. Nominal max gain [F - G] (dBd)	16.79	16.79	16.79	16.79
I. Compensation losses (dB)	0.00	0.00	0.00	0.00
J. Effec. max gain [H - I] (dBd)	16.79	16.79	16.79	16.79
K. Effec. max gain (times)	47.70	47.70	47.70	47.70
L. Effec. max power [E * K] (KW)	10.6285	10.6285	10.6285	10.6285
M. Max power depr. angle (°)	0.0	0.0	0.0	0.0
N. Max power az. angle (°)	0	90	180	270

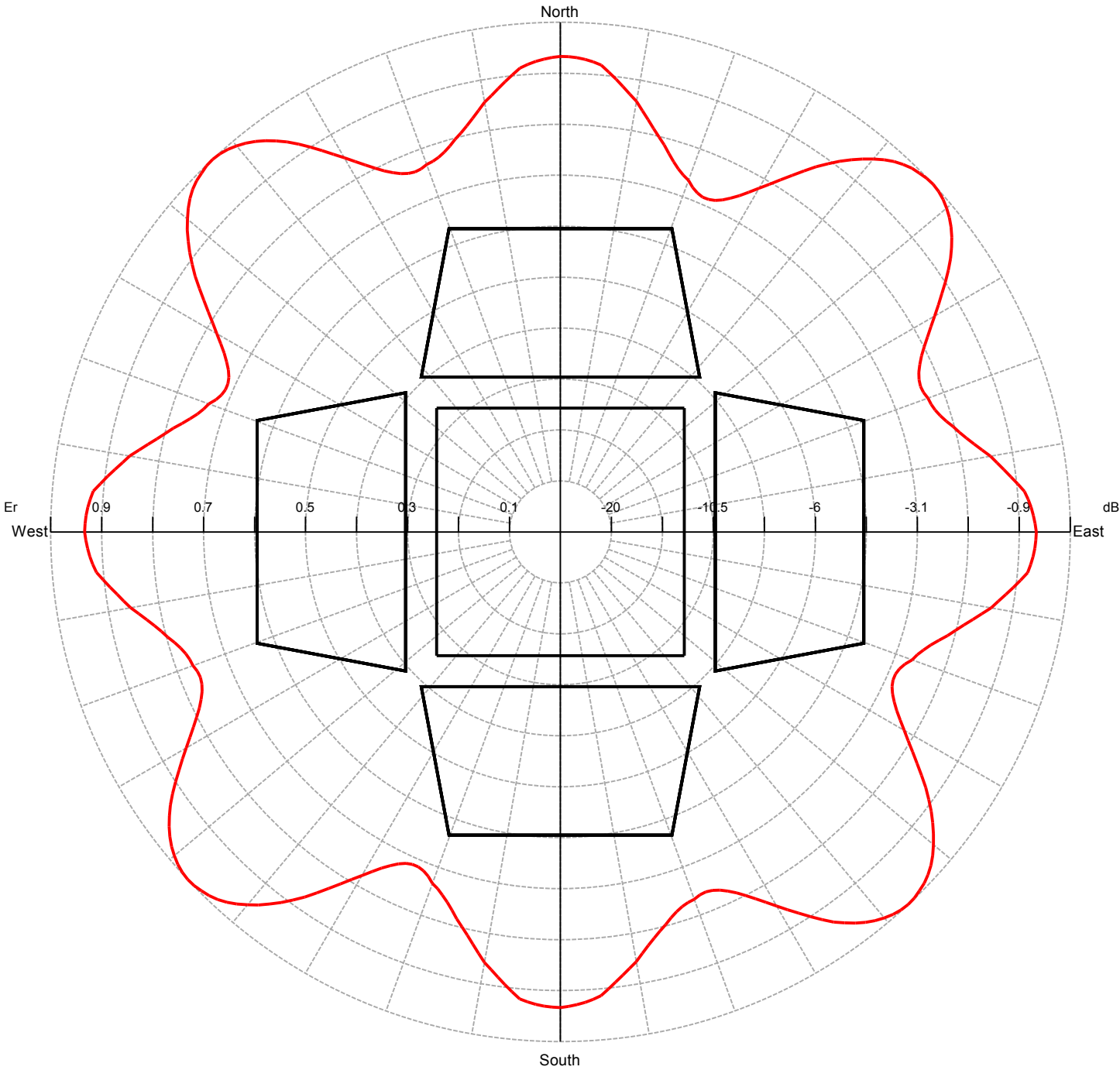
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	9.9	90	9.9	180	9.9	270	9.9
10	9.1	100	9.1	190	9.1	280	9.1
20	7.8	110	7.8	200	7.8	290	7.8
30	8.3	120	8.3	210	8.3	300	8.3
40	10.1	130	10.1	220	10.1	310	10.1
50	10.4	140	10.4	230	10.4	320	10.4
60	9.0	150	9.0	240	9.0	330	9.0
70	8.2	160	8.2	250	8.2	340	8.2
80	9.1	170	9.1	260	9.1	350	9.1

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Horizontal diagram at 0.0° depres. (Total Antenna)

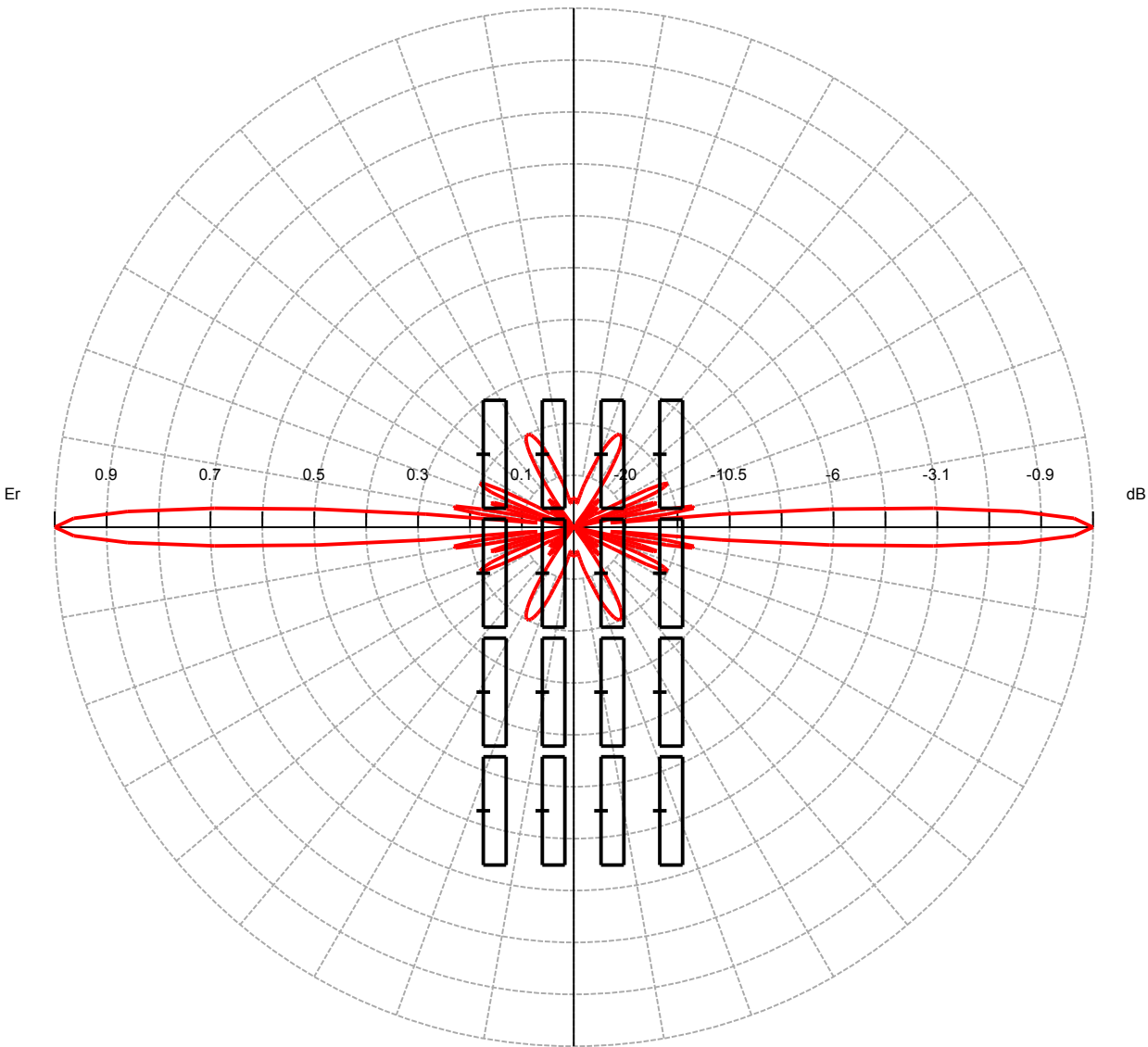


0.0° depres. (Total Antenna), Gain (dBd): 10.95 ERP T.Max(KW): 12.4509 ERP E.Max(KW): 11.0968

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 10.35

ERP T.Max(KW): 10.8459    ERP E.Max(KW): 9.6664