KISU(DT)

Channel: D17

Omni-Directional

Elliptical Polarization (75H / 25V)

JA/AS

JAMPRO ANTENNAS, INC.

PROSTAR SERIES
UHF SLOT ANTENNA

True and Tested Prostar Slot antenna available for Analog & Digital applications.

Years of Proven Performance

Provides a compact solution that conserves tower space and minimizes tower loading.

- **Horizontal, Elliptical, Circular Polarization available**
- **Partial radome for low windloading & full radomes available**
- **Broadband option available**
- **Constructed of high strength aluminum and GRP radome**
- **5 standard catalog patterns**
- **Custom azimuth patterns available**

TYPICAL SPECIFICATIONS	
Polarization	HPOL, CPOL, EPOL
Power Rating	Up to 30 kW average
Input Impedance	50 ohm
VSWR	1.1:1 or better

6340 Sky Creek Dr, Sacramento, CA 95828 | T: 916.383.1177 | F: 916.383.1182

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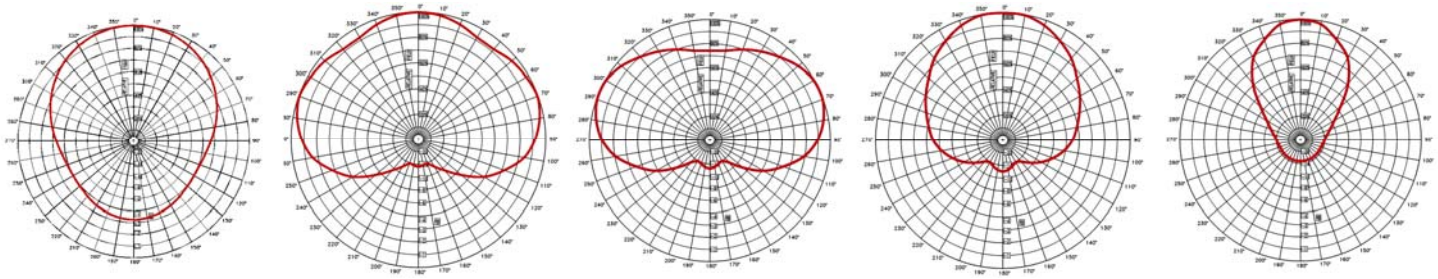


TYPICAL SPECIFICATIONS								
# BAYS	Omni	Cardioid	Peanut	Medium-Cardioid	Lobe	Height	Weight	Windloads
8	*8.0x *9.0 dBd 14.1x 11.5 dBd	13.1x 11.1 dBd	15.2x 11.8 dBd	20.4x 13.1 dBd	35.2x 15.5 dBd	Contact Factory		
12	*12.0x *10.8 dBd 21.49x 13.32 dBd	19.6x 12.9 dBd	22.9x 13.6 dBd	30.6x 14.8 dBd	52.9x 17.2 dBd			
16	*16.0x *12.0 dBd 28.2x 14.5 dBd	26.2x 14.1 dBd	30.5x 14.8 dBd	40.8x 16.1 dBd	70.5x 18.5 dBd			
24	*24.0x *13.8 dBd 42.86x 16.32 dBd	39.3x 15.9 dBd	45.8x 16.6 dBd	61.2x 17.8 dBd	105.8x 20.2 dBd			
32	*32.0x *15.05 dBd 54.28x 17.35 dBd	52.4x 17.1 dBd	61.1x 17.8 dBd	81.6x 19.1 dBd	141.1x 21.4 dBd			

*Value provides average/RMS gain; All other stated gains are Peak gains. Gains do not include losses for feed system , beam tilt, or null full.

NOTE:

1. Loading data are for side mount antennas.
2. All inputs EIA flange, female, 50 ohms
3. Partial Radome standard, Full Radome available. Specifications upon request
4. Power and dB gains are typical RMS gains for Omni-directional, horizontal and vertical components.

OPTIONS:

Pattern Measurement Service, Electrical Beam Tilt, Null Fill, Special Mounting Brackets.

Since many factors contribute to a station's compliance with the FCC exposure guidelines for radio frequency radiation, JAMPRO ANTENNAS, INC. cannot accept any responsibility in this matter. The station must examine and determine its status based on each individual situation. For reduced low angle radiation near the tower, a low RFR model of this antenna is available. Contact the factory for pricing data and further details.

*All specifications are subject to change without notice.

TV ANTENNA SPECIFICATIONS

CUSTOMER:	Idaho Public TV / KISU(DT)
CHANNEL:	17 (488 – 494 MHz)
ANTENNA DESCRIPTION:	Side-mounted, Prostar UHF Slot Antenna, Elliptical Polarization
ANTENNA TYPE:	JA/AS-32 / 17 SEO

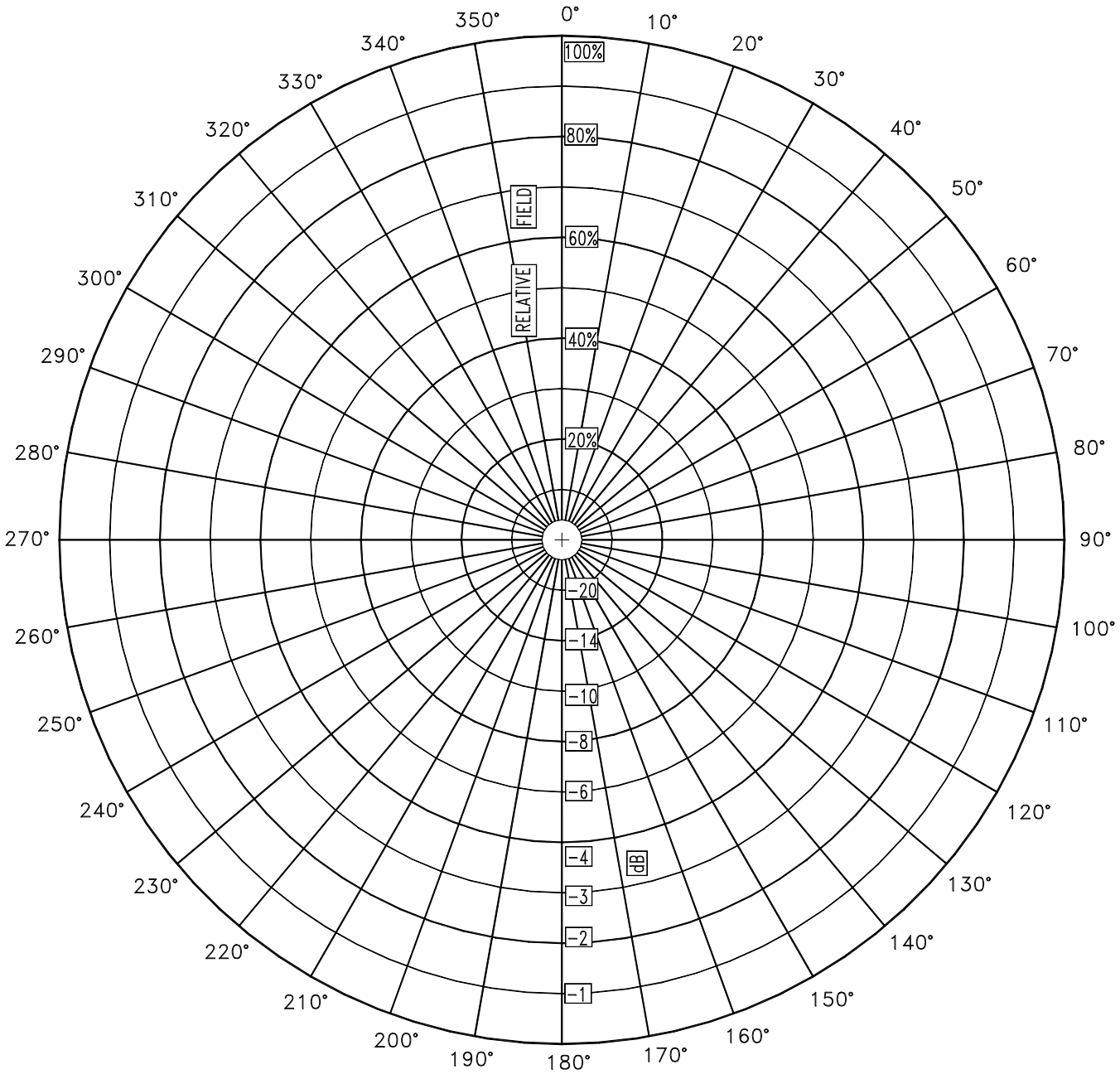
ELECTRICAL SPECIFICATIONS

RMS gain:	24x / 13.8 dBd (H-Pol) 8x / 9.03 dBd (V-Pol)
Elliptical split:	75 / 25 (Horizontal / Vertical)
Array data:	32 bays
Electrical beam tilt:	-1º
Null fill:	20%
Antenna VSWR:	1.1:1
Max. input power rating	10 kW
Antenna input impedance:	50 ohm

MECHANICAL SPECIFICATIONS

Overall height of antenna, est:	To be provided
Antenna net weight, est:	To be provided
Effective projected area (EPA), est:	To be provided
Antenna input connector size, EIA:	3-1/8”

***NOTE*:** THESE SPECIFICATIONS ARE PREDICTIONS BASED ON AVAILABLE DATA. THE ACTUAL PERFORMANCE MAY DIFFER FROM THESE DUE TO THE ELECTRICAL, MECHANICAL AND MEASURED LIMITATIONS AT YOUR FREQUENCIES.



Customer: Idaho Public TV
Channel: 17
Site: KISU(DT)

Model: JA/AS-32 / 17 SEO
Description: UHF Slot Antenna
Notes: Elliptically Polarized

Azimuth Pattern Tabulation

AZIMUTH	FIELD	dB
0	1.00	0.0
10	1.00	0.0
20	1.00	0.0
30	1.00	0.0
40	1.00	0.0
50	1.00	0.0
60	1.00	0.0
70	1.00	0.0
80	1.00	0.0
90	1.00	0.0
100	1.00	0.0
110	1.00	0.0
120	1.00	0.0
130	1.00	0.0
140	1.00	0.0
150	1.00	0.0
160	1.00	0.0
170	1.00	0.0
180	1.00	0.0
190	1.00	0.0
200	1.00	0.0
210	1.00	0.0
220	1.00	0.0
230	1.00	0.0
240	1.00	0.0
250	1.00	0.0
260	1.00	0.0
270	1.00	0.0
280	1.00	0.0
290	1.00	0.0
300	1.00	0.0
310	1.00	0.0
320	1.00	0.0
330	1.00	0.0
340	1.00	0.0
350	1.00	0.0

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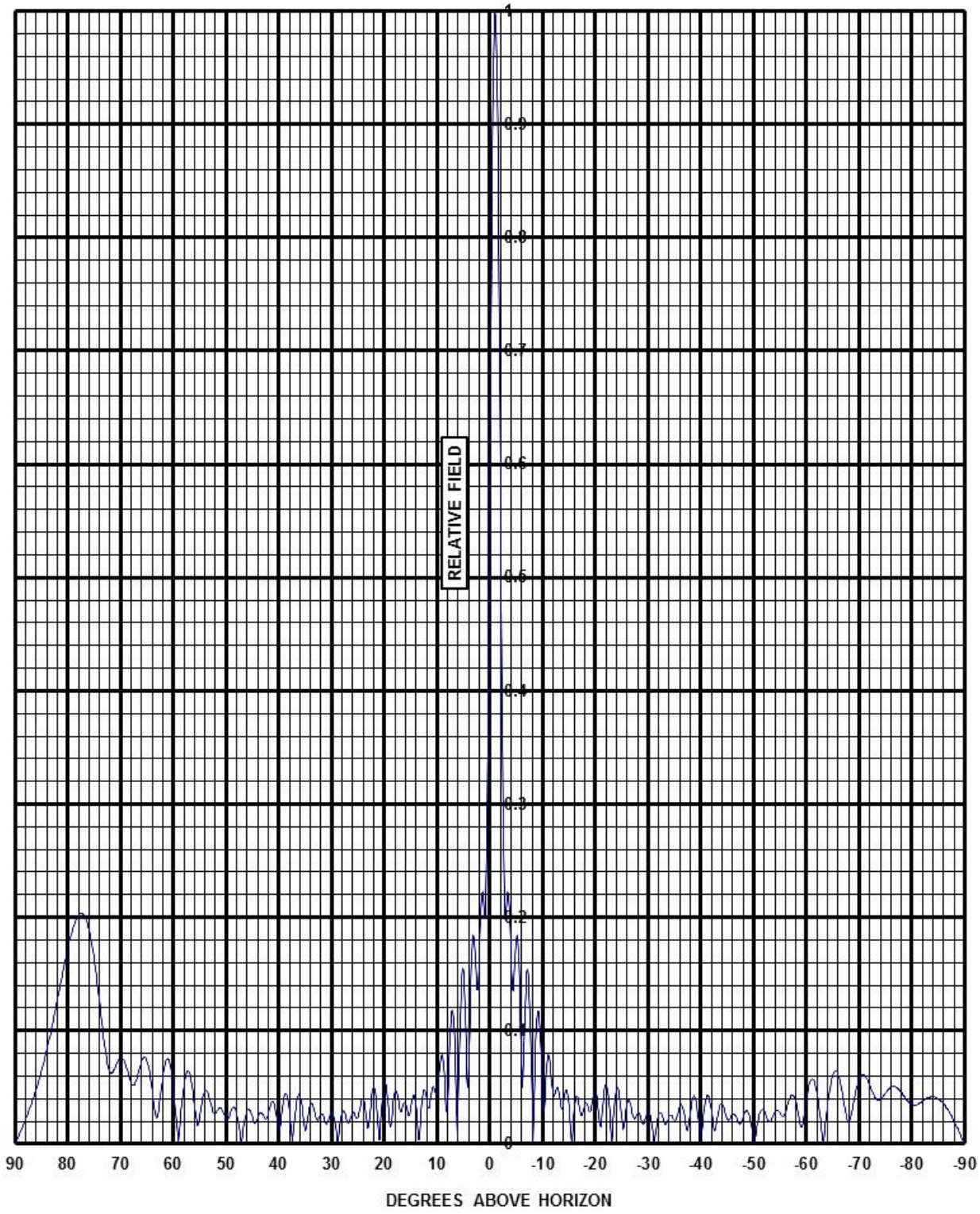
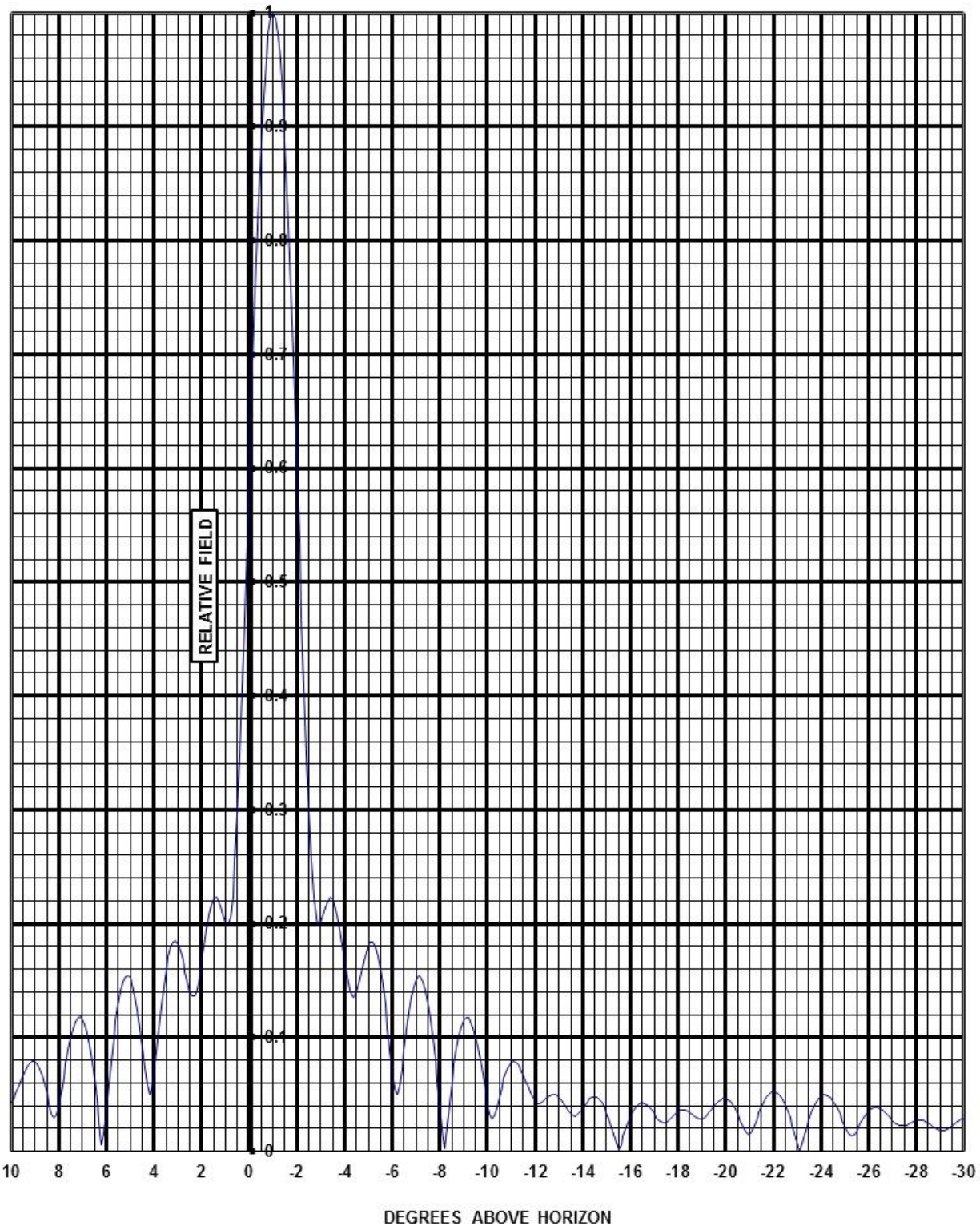


Customer: Idaho Public TV
Site: KISU(DT)
Channel: 17

Model: JA/AS-32/17 SEO
Description: UHF Slot Antenna
-1° Beam Tilt, 20% Null Fill



Customer: Idaho Public TV
Site: KISU(DT)
Channel: 17

Model: JA/AS-32/17 SEO
Description: UHF Slot Antenna
-1° Beam Tilt, 20% Null Fill

Elevation Pattern Tabulation

RELATIVE FIELD VS ELEVATION ANGLE

ELEVATION ANGLE	RELATIVE FIELD	ELEVATION ANGLE	RELATIVE FIELD	ELEVATION ANGLE	RELATIVE FIELD
10	0.044	-26	0.035	-61	0.057
9	0.079	-27	0.027	-62	0.045
8	0.040	-28	0.027	-63	0.008
7	0.116	-29	0.018	-64	0.034
6	0.037	-30	0.029	-65	0.061
5	0.152	-31	0.006	-66	0.061
4	0.069	-32	0.026	-67	0.040
3	0.182	-33	0.019	-68	0.019
2	0.166	-34	0.024	-69	0.038
1	0.201	-35	0.021	-70	0.057
0	0.600	-36	0.033	-71	0.060
-1	1.000	-37	0.022	-72	0.052
-2	0.600	-38	0.029	-73	0.041
-3	0.201	-39	0.040	-74	0.039
-4	0.167	-40	0.001	-75	0.045
-5	0.181	-41	0.041	-76	0.050
-6	0.070	-42	0.029	-77	0.050
-7	0.151	-43	0.020	-78	0.045
-8	0.040	-44	0.036	-79	0.039
-9	0.115	-45	0.022	-80	0.035
-10	0.043	-46	0.026	-81	0.035
-11	0.078	-47	0.020	-82	0.038
-12	0.044	-48	0.024	-83	0.041
-13	0.048	-49	0.027	-84	0.042
-14	0.038	-50	0.004	-85	0.040
-15	0.034	-51	0.024	-86	0.035
-16	0.031	-52	0.029	-87	0.029
-17	0.033	-53	0.019	-88	0.020
-18	0.035	-54	0.028	-89	0.010
-19	0.028	-55	0.027	-90	0.000
-20	0.046	-56	0.027		
-21	0.015	-57	0.042		
-22	0.053	-58	0.037		
-23	0.008	-59	0.015		
-24	0.048	-60	0.039		
-25	0.022				

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FAX (916) 383-1182 Web www.Jampro.com

System Gain-Loss Calculator Summary Sheet:

Description		Values*	
Frequency			491.0 MHz
Effective Radiated Power		22.36 dBk	172.00 kW
Antenna Gain		13.80 dBd	24.00 Times
Required Antenna Input Power		8.55 dBk	7.17 kW
Coax System Length		155.0 feet	47.2 Meters
Coax Loss Per 100 Feet		0.205 dB	
Total Coax Losses		0.32 dB	0.55 kW
Coax Efficiency:		92.94 %	
Combiner Losses		0.00 dB	0.00 kW
Other Losses		0.00 dB	0.00 kW
Total System Losses		0.32 dB	0.55 kW
Required Transmitter Output	=	8.87 dBk	7.71 kW

Company Name:	KISU (DT)
Info Line:	JA/MS-32 / 17 SEO
Coax Type:	3" Rigid Line
Date:	30-Jan-24

Note: *Values are rounded to two places. Information is provide as an estimate only. Jampro accepts no responsibility for accuracy. Please verify these figures with your consulting engineer.