



KUID(DT)

Channel: D12

Omni-Directional

Elliptical Polarization (75H / 25V)



VHF SLOT ANTENNA

The Jampro JSL-V Band III VHF Slot Antenna series is designed for performance. Detail in manufacturing and tuning for your pattern assures premium performance. The feed lines are pressurized for protection, and the slots are radome sealed to protect the antenna from even the harshest environments. The power rating of these antennas are conservative and can be increased. The use of a waveguide power dividing feed system doubles the power rating of the antennas.

Also available the JSL-V slot antenna uses marine brass, copper, aluminum and virgin Teflon in construction, is the finest antenna of its type.

VHF Band III (174-230 MHz)

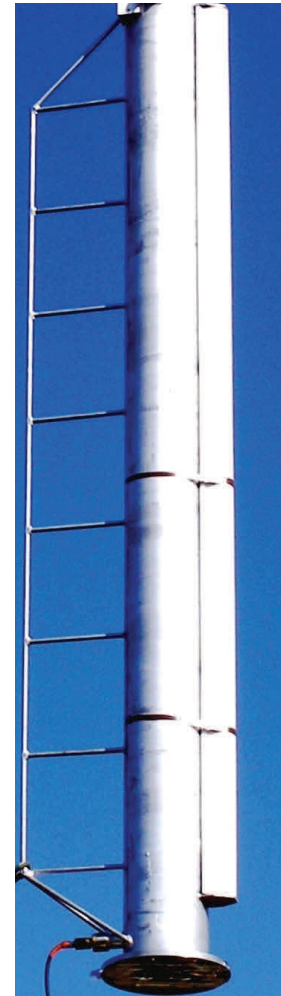
Excellent VSWR

**Horizontal, elliptical or circular
polarizations available**

Standard azimuth & custom patterns available

**Partial radome for low windloading & full
radomes available**

Ideal for digital and analog broadcasts



TYPICAL SPECIFICATIONS

Polarization	HPOL/CPOL/EPOL
VSWR	1.1:1 or better across channel
Power Rating	1 kW to 90 kW
Impedance	50 or 75 ohm



TV ANTENNA SPECIFICATIONS

<u>CUSTOMER:</u>	Idaho Public TV / KUID(DT)
<u>CHANNEL:</u>	12 (204 – 210 MHz)
<u>ANTENNA DESCRIPTION:</u>	Top-mounted, Prostar VHF Slot Antenna, Elliptical Polarization
<u>ANTENNA TYPE:</u>	JSM-12 / 12 TEO-V

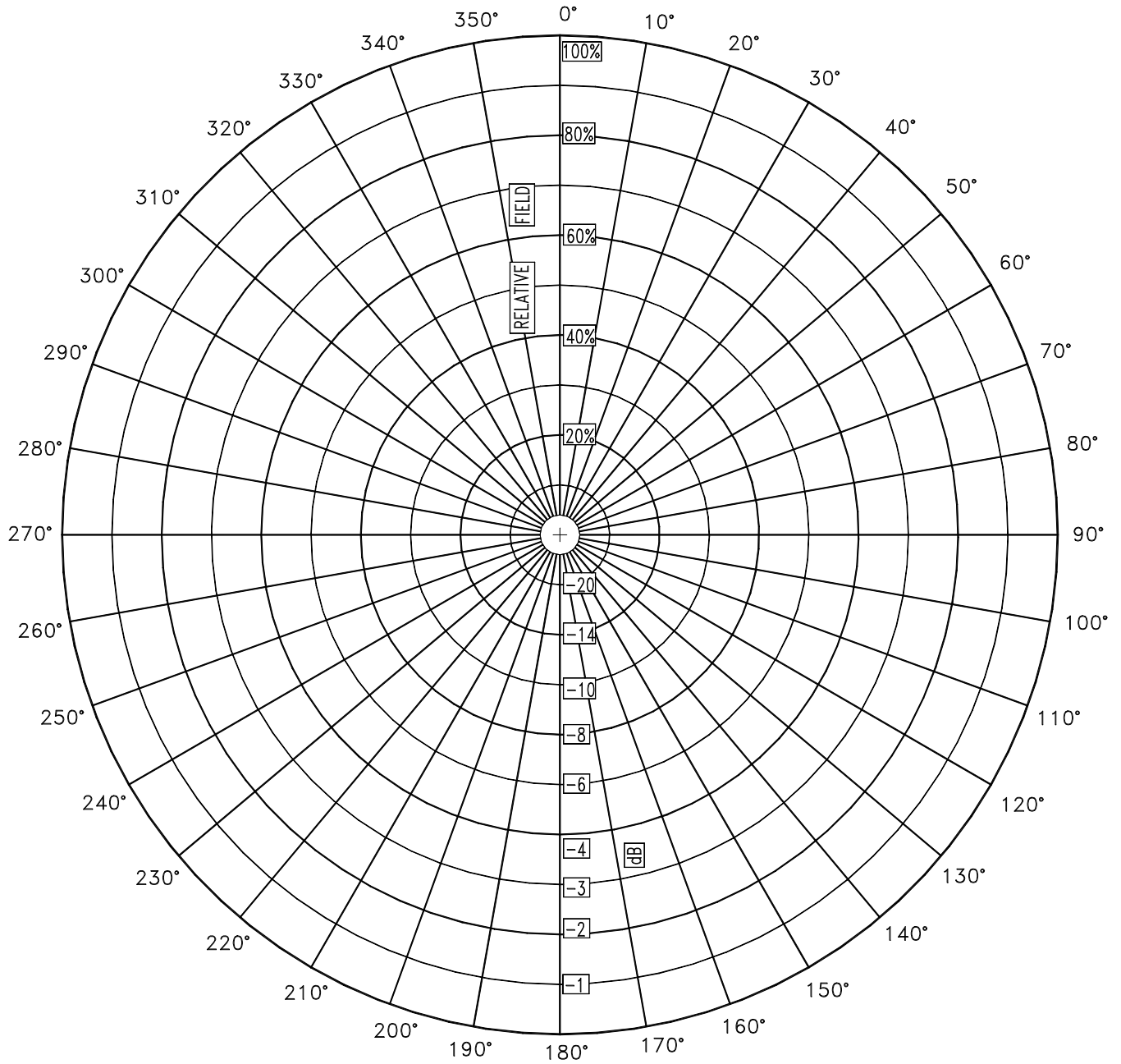
ELECTRICAL SPECIFICATIONS

RMS gain:	9.0x / 9.54 dBd (H-Pol) 3.0x / 4.77 dBd (V-Pol)
Array data:	12 bays
Electrical beam tilt:	-0.5°
Null fill:	10%
Antenna VSWR:	1.1:1
Max. input power rating:	10 kW
Antenna input impedance:	50 ohms

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: 12
Site: KUID(DT)

Model: JSM-12/12 TEO-V
Description: VHF Slot Antenna
Notes: Elliptically Polarized

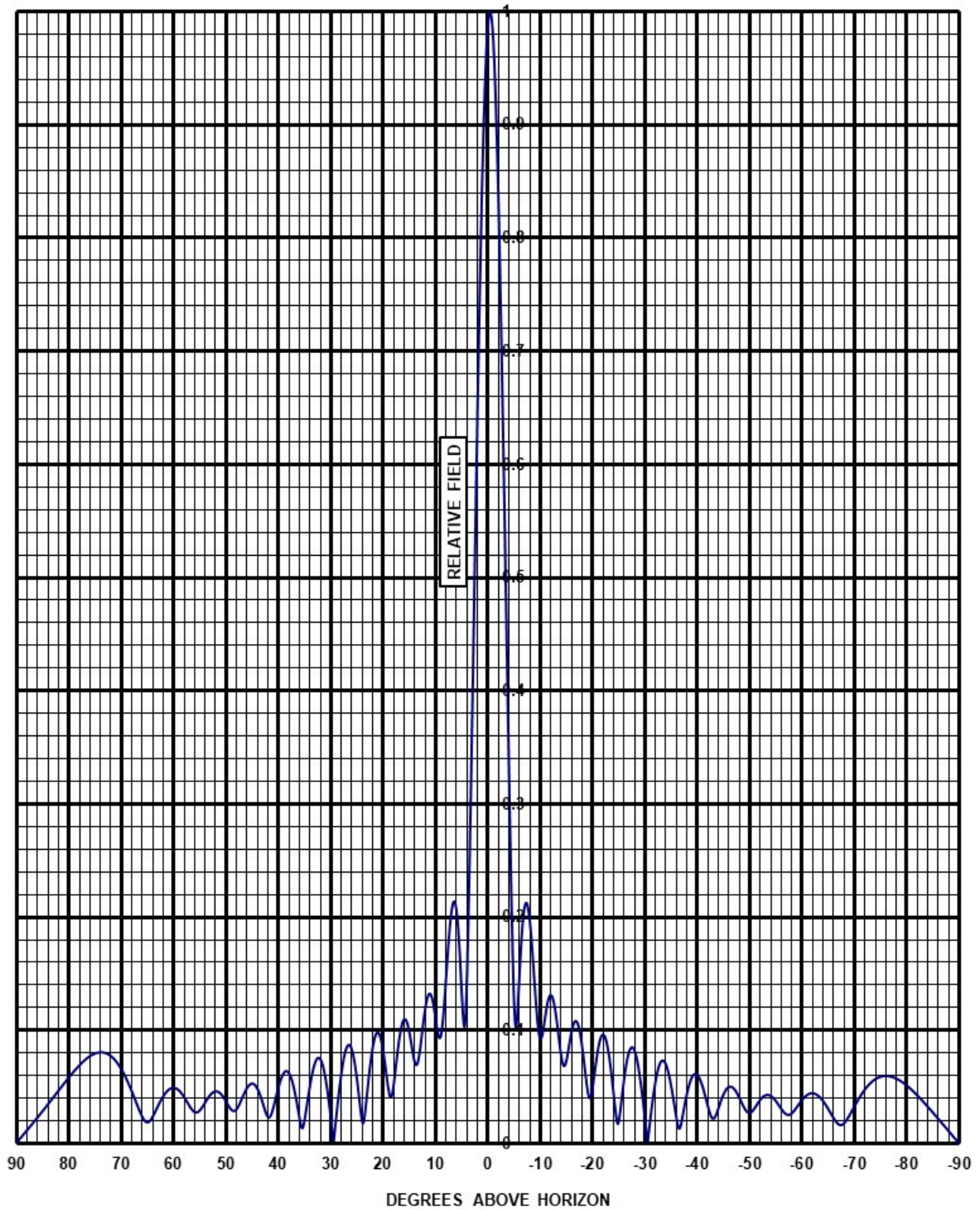


Azimuth Pattern Tabulation

<u>AZIMUTH</u>	<u>FIELD</u>	<u>dB</u>
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

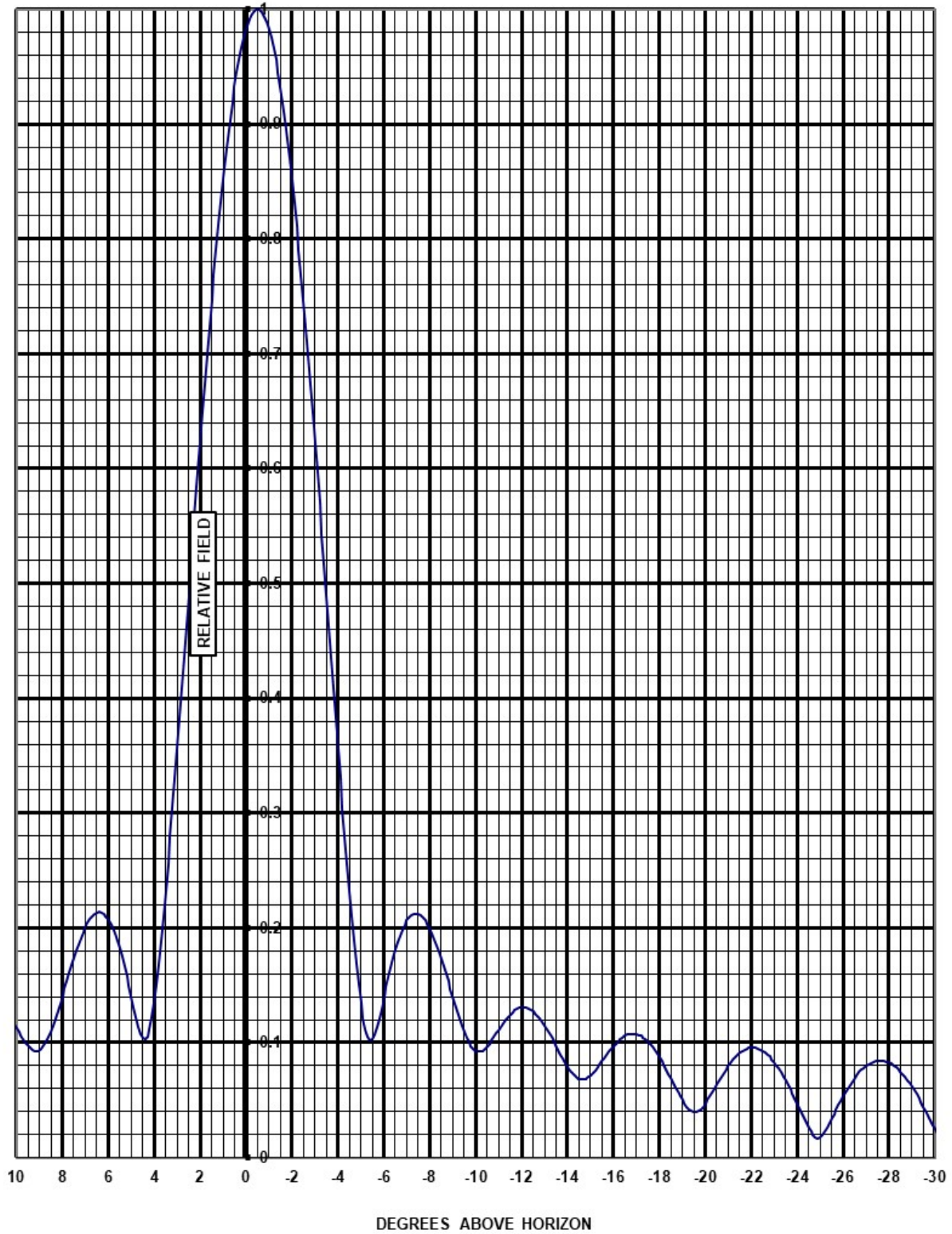
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Model: JSM-12 / 12 TEO-V
Description: VHF Slot Antenna
-0.5° Beam Tilt, 10% Null Fill



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-0.5° Beam Tilt, 10% Null Fill



Elevation Pattern Tabulation

RELATIVE FIELD VS ELEVATION ANGLE

<u>ELEVATION ANGLE</u>	<u>RELATIVE FIELD</u>	<u>ELEVATION ANGLE</u>	<u>RELATIVE FIELD</u>	<u>ELEVATION ANGLE</u>	<u>RELATIVE FIELD</u>
10	0.113	-26	0.053	-61	0.042
9	0.093	-27	0.080	-62	0.044
8	0.141	-28	0.083	-63	0.042
7	0.200	-29	0.062	-64	0.038
6	0.208	-30	0.024	-65	0.031
5	0.140	-31	0.017	-66	0.023
4	0.135	-32	0.052	-67	0.017
3	0.356	-33	0.071	-68	0.017
2	0.623	-34	0.070	-69	0.023
1	0.852	-35	0.052	-70	0.032
0	0.983	-36	0.024	-71	0.040
-1	0.983	-37	0.017	-72	0.047
-2	0.851	-38	0.042	-73	0.052
-3	0.622	-39	0.058	-74	0.056
-4	0.356	-40	0.060	-75	0.058
-5	0.135	-41	0.051	-76	0.059
-6	0.139	-42	0.034	-77	0.059
-7	0.206	-43	0.022	-78	0.057
-8	0.199	-44	0.029	-79	0.055
-9	0.140	-45	0.042	-80	0.051
-10	0.093	-46	0.049	-81	0.047
-11	0.111	-47	0.048	-82	0.043
-12	0.131	-48	0.041	-83	0.038
-13	0.115	-49	0.031	-84	0.033
-14	0.079	-50	0.027	-85	0.027
-15	0.071	-51	0.031	-86	0.022
-16	0.097	-52	0.038	-87	0.016
-17	0.107	-53	0.042	-88	0.011
-18	0.088	-54	0.042	-89	0.006
-19	0.050	-55	0.038	-90	0.000
-20	0.047	-56	0.031		
-21	0.080	-57	0.026		
-22	0.096	-58	0.026		
-23	0.083	-59	0.031		
-24	0.047	-60	0.038		
-25	0.018				

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FAX (916) 383-1182

Sacramento, CA 95828
Web www.Jampro.com

System Gain-Loss Calculator Summary Sheet:

Description	Values*	
Frequency		207.0 MHz
Effective Radiated Power	18.92 dBk	78.00 kW
Antenna Gain	9.54 dBd	9.00 Times
Required Antenna Input Power	9.38 dBk	8.66 kW
Coax System Length	310.0 feet	94.5 Meters
Coax Loss Per 100 Feet	0.132 dB	
Total Coax Losses	0.41 dB	0.86 kW
Coax Efficiency:	90.98 %	
Combiner Losses	0.00 dB	0.00 kW
Other Losses	0.00 dB	0.00 kW
Total System Losses	0.41 dB	0.86 kW
Required Transmitter Output	= 9.79 dBk	9.53 kW

Company Name: **KUID (DT)**
Info Line: **JSM-12 / 12 TEO-V**
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.