



## **TV ANTENNA SPECIFICATIONS**

CUSTOMER: WLNY-DT

CHANNEL: 47 (668-674 MHz)

ANTENNA DESCRIPTION: Top-mounted, Prostar UHF Slot Antenna, Circular Polarization

ANTENNA TYPE: JSM-24/47 TCBP

### **ELECTRICAL SPECIFICATIONS**

H-Pol power gain: 34.2x / 15.34 dBd  
V-Pol power gain: 34.2x / 15.34 dBd

Array data: 24 bays

Electrical beam tilt: -1.25°

Null fill: 22%

Antenna VSWR: 1.1:1 or better across channel

Max. input power rating 25 kW – Avg.

Antenna input impedance: 50 ohm

### **MECHANICAL SPECIFICATIONS**

Overall height of antenna, est: 35.3 FT.

Antenna net weight, est: 2,515 lbs. no ice; 2,980 lbs. ½" ice

Windload, est: 2,435 lbs. no ice; 3,370 lbs. ½" ice

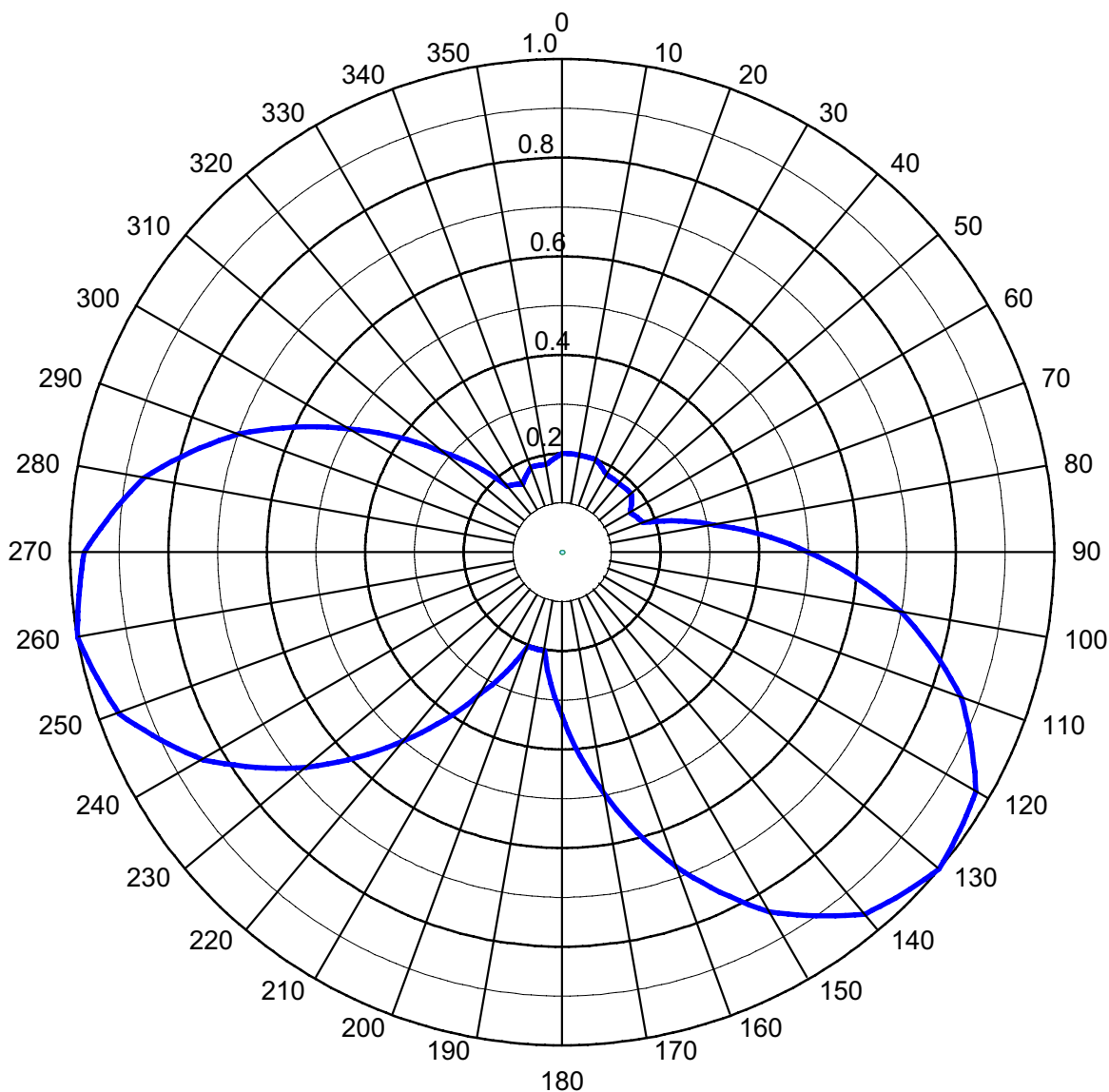
Antenna input connector size, EIA: 6-1/8"

**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.



6340 Sky Creek Drive  
Sacramento, California 95828 USA

Telephone (916) 383-1177  
Fax (916) 383-1182



Values in Relative Field

Customer: WLNY-DT  
Channel: 47

Model: JSM-24/47 TEBP  
Description: UHF Slot Antenna  
Notes: Elliptical Polarization



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### Azimuth Pattern Tabulation

<u>AZIMUTH</u>	<u>FIELD</u>	<u>dB</u>
0	0.200	-13.98
10	0.200	-13.98
20	0.200	-13.98
30	0.181	-14.85
40	0.181	-14.85
50	0.184	-14.70
60	0.160	-15.92
70	0.175	-15.14
80	0.315	-10.03
90	0.500	-6.02
100	0.700	-3.10
110	0.864	-1.27
120	0.971	-0.26
130	1.000	0.00
140	0.958	-0.37
150	0.842	-1.49
160	0.679	-3.36
170	0.498	-6.06
180	0.331	-9.60
190	0.203	-13.85
200	0.203	-13.85
210	0.331	-9.60
220	0.498	-6.06
230	0.679	-3.36
240	0.842	-1.49
250	0.958	-0.37
260	1.000	0.00
270	0.971	-0.26
280	0.864	-1.27
290	0.700	-3.10
300	0.500	-6.02
310	0.315	-10.03
320	0.175	-15.14
330	0.160	-15.92
340	0.184	-14.70
350	0.181	-14.85

Customer: WLNY-DT  
Channel: 47

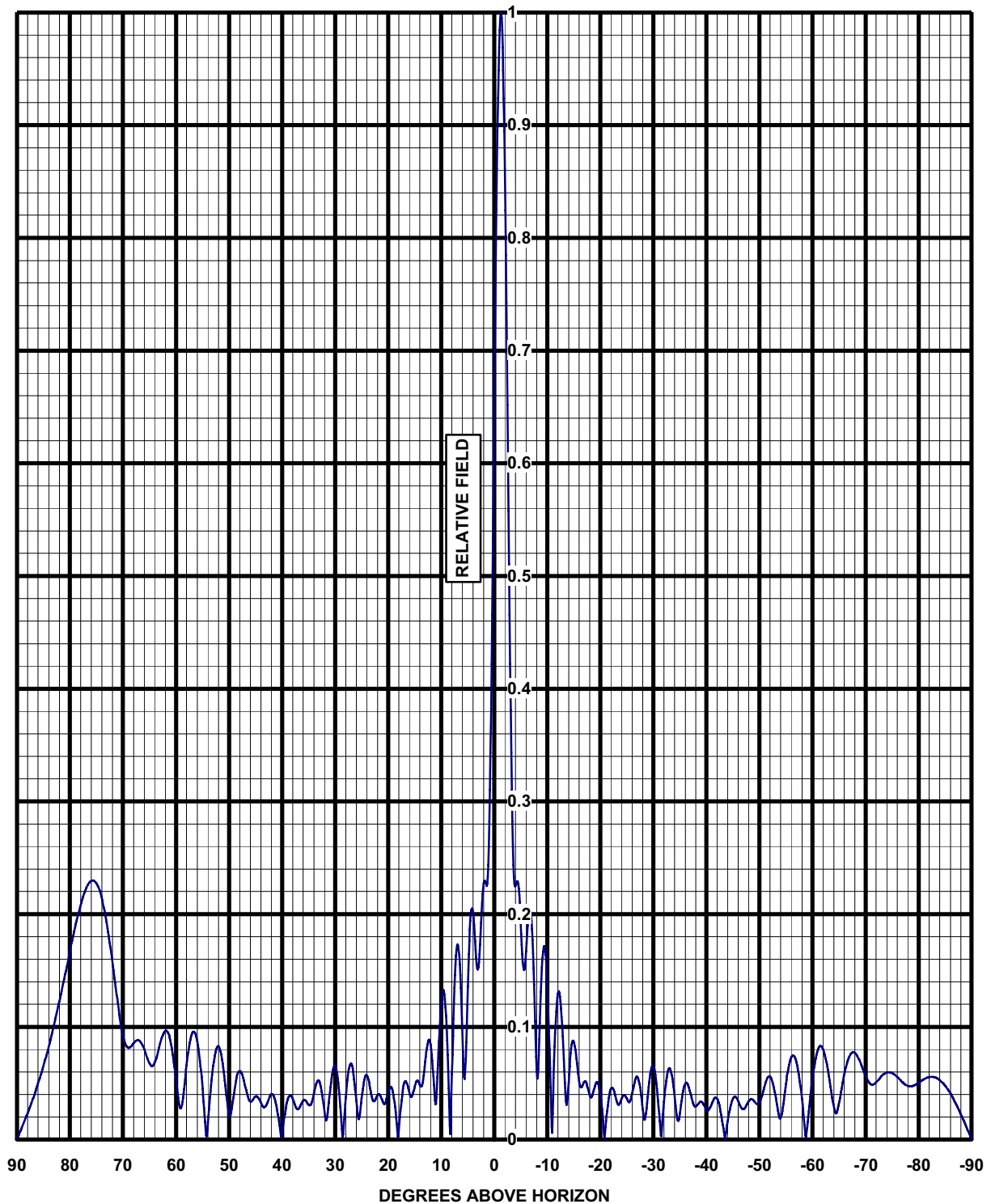
Model: JSM-24/47 TEBP  
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COMPUTED ELEVATION PATTERN



Customer: WLNY-DT

Channel: 47 (668-674 MHz)

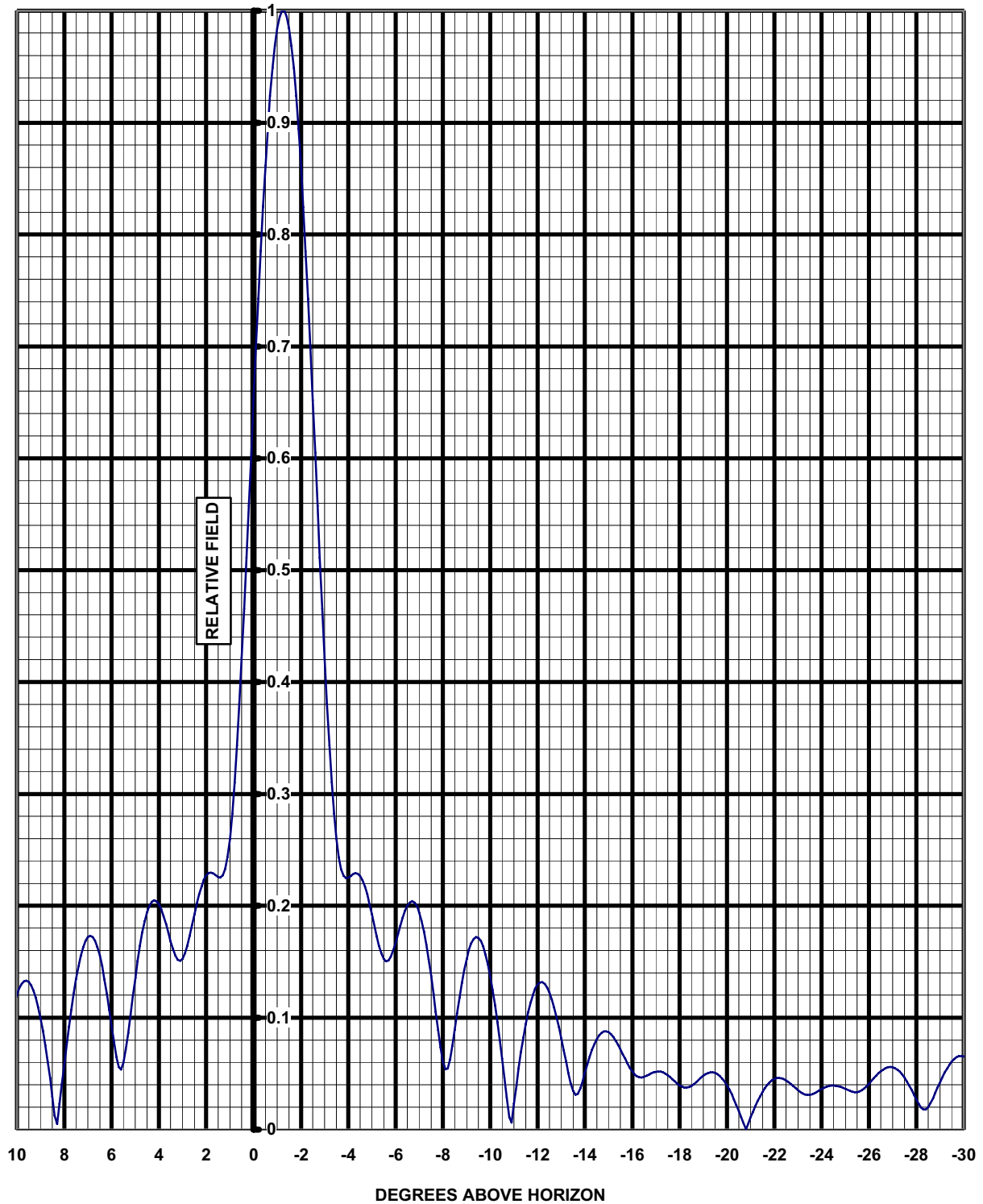
Model: JSM-24/47 TEBP  
Description: UHF Slot Antenna  
**-1.25° Beam Tilt, 22% Null Fill**



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# ELEVATION PATTERN



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## Elevation Pattern Tabulation

### 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	0.121	-26	0.041	-61	0.080
9	0.100	-27	0.056	-62	0.080
8	0.058	-28	0.027	-63	0.059
7	0.172	-29	0.042	-64	0.029
6	0.092	-30	0.065	-65	0.032
5	0.136	-31	0.029	-66	0.058
4	0.201	-32	0.034	-67	0.074
3	0.153	-33	0.063	-68	0.077
2	0.227	-34	0.039	-69	0.069
1	0.260	-35	0.024	-70	0.057
0	0.652	-36	0.050	-71	0.049
-1	0.984	-37	0.041	-72	0.051
-2	0.861	-38	0.029	-73	0.056
-3	0.422	-39	0.034	-74	0.060
-4	0.225	-40	0.027	-75	0.059
-5	0.192	-41	0.032	-76	0.055
-6	0.167	-42	0.036	-77	0.051
-7	0.194	-43	0.016	-78	0.048
-8	0.061	-44	0.016	-79	0.048
-9	0.152	-45	0.036	-80	0.050
-10	0.137	-46	0.034	-81	0.053
-11	0.023	-47	0.027	-82	0.055
-12	0.130	-48	0.034	-83	0.055
-13	0.081	-49	0.034	-84	0.053
-14	0.051	-50	0.033	-85	0.048
-15	0.087	-51	0.048	-86	0.041
-16	0.052	-52	0.056	-87	0.032
-17	0.052	-53	0.040	-88	0.022
-18	0.039	-54	0.019	-89	0.011
-19	0.048	-55	0.050	-90	0.000
-20	0.039	-56	0.073		
-21	0.011	-57	0.068		
-22	0.045	-58	0.036		
-23	0.035	-59	0.011		
-24	0.036	-60	0.054		
-25	0.036				

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