

TECHNICAL STATEMENT
TRANSMITTING ANTENNA INFORMATION
DIGITAL TELEVISION STATION WPMI-DT
MOBILE, ALABAMA
CH 47 1000 KW (MAX-DA) 558 M

Technical Statement

This Technical Statement was prepared in support of the application for license for WPMI-DT on Channel 47 assigned to Mobile, Alabama. WPMI-DT is authorized in its construction permit to employ an Andrew ATW25H3-HTP3-47S directional antenna.¹ However, an Andrew ATW22H3-HTP3-47S was actually installed. The only difference between the antennas is the vertical plane gain; there is no difference in the horizontal plane or the specified electrical beamtilt of 0.75 degrees. The attached appendix provides the installed vertical plane information.

Charles A. Cooper

November 26, 2002

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¹ See FCC File Number: BMPCDT-20010213ABQ.

APPENDIX

TRANSMITTING ANTENNA MANUFACTURER SPECIFICATIONS

ANDREW **AZIMUTH PATTERN**

Type: CH47AZ-H-BID-P3

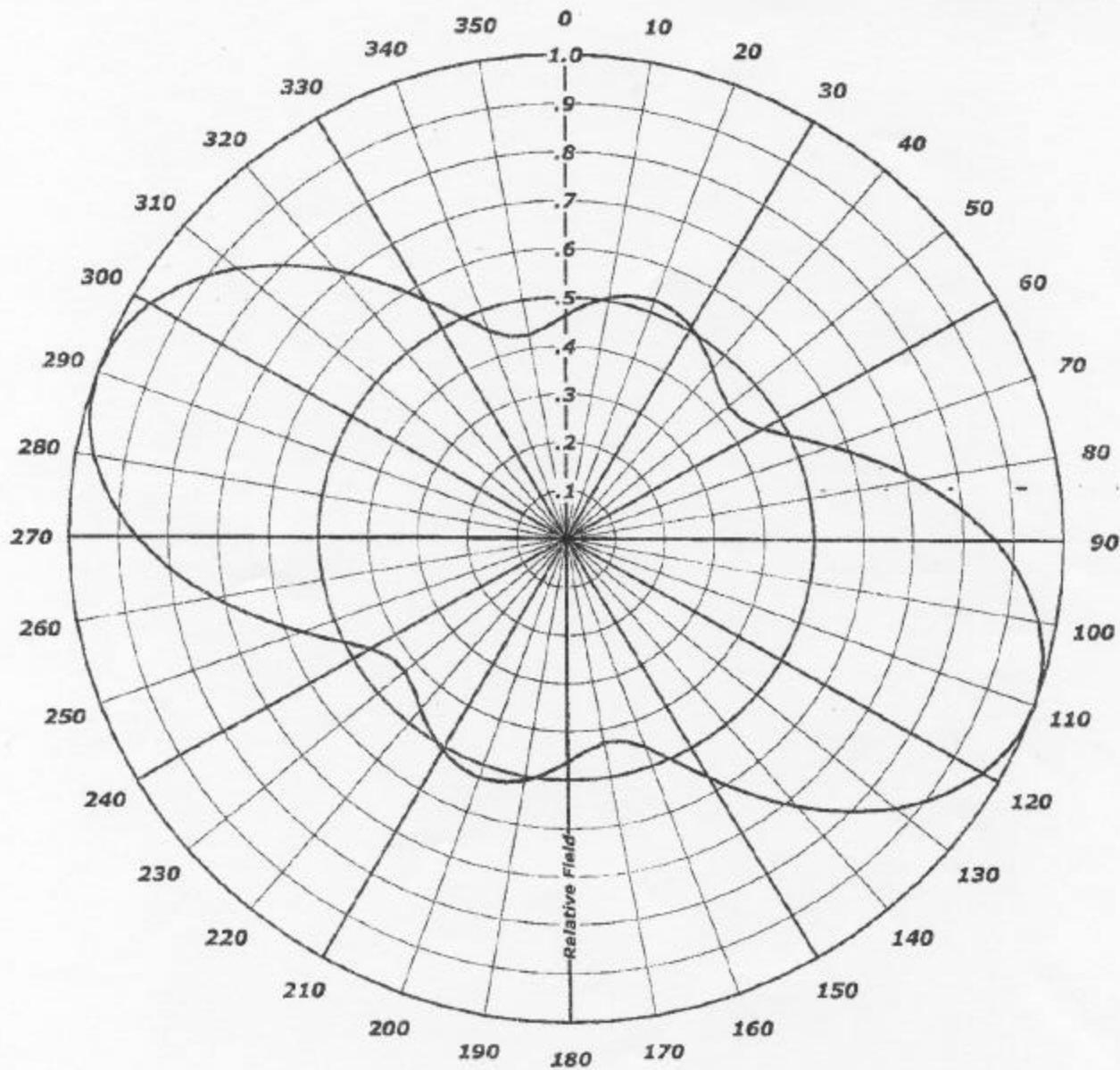
	Numeric	dBd
Directivity:	<u>2.24</u>	<u>(3.50)</u>

Peak(s) At: _____

Polarization: Horizontal

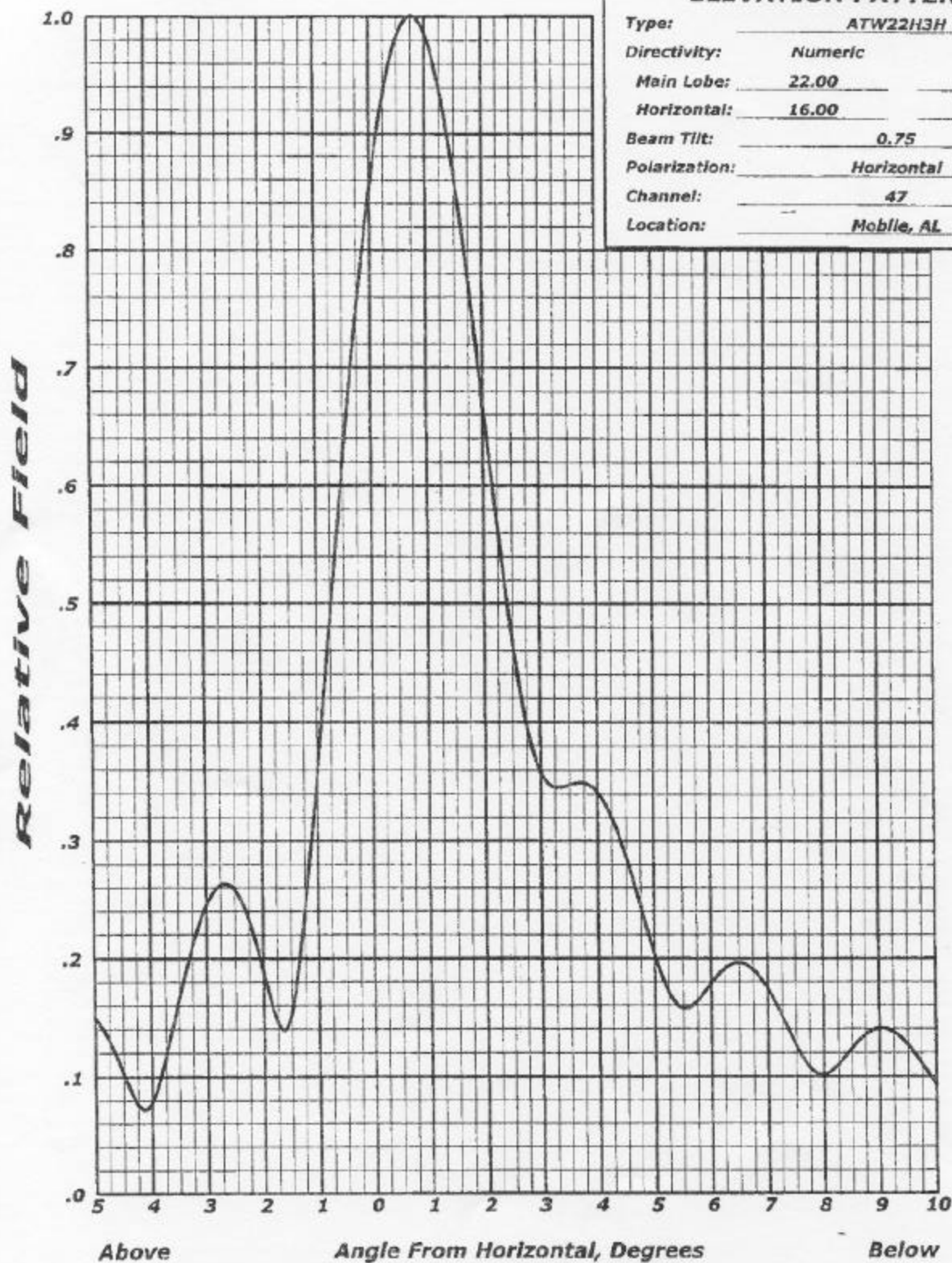
Channel: 47

Location: Mobile, AL



ANDREW **ELEVATION PATTERN**

Type:	ATW22H3H	
Directivity:	Numeric	dBd
Main Lobe:	22.00	(13.42)
Horizontal:	16.00	(12.04)
Beam Tilt:	0.75	
Polarization:	Horizontal	
Channel:	47	
Location:	Mobile, AL	



TABULATED DATA FOR ELEVATION PATTERN TYPE ATW22H3H

ANGLE FIELD dB -5° TO 10° IN 0.25° INCREMENTS	ANGLE FIELD dB 10° TO 90° IN 0.5° INCREMENTS	ANGLE FIELD dB	ANGLE FIELD dB
-5.00 0.1485 -16.57	9.00 0.1405 -17.05	36.00 0.0413 -27.69	64.00 0.0133 -37.49
-4.75 0.1303 -17.70	9.25 0.1375 -17.23	36.50 0.0326 -29.75	64.50 0.0057 -44.88
-4.50 0.1027 -19.77	9.50 0.1268 -17.94	37.00 0.0216 -33.30	65.00 0.0129 -37.76
-4.25 0.0766 -22.32	9.75 0.1106 -19.12	37.50 0.0222 -33.07	65.50 0.0233 -32.66
-4.00 0.0784 -22.11	10.00 0.0930 -20.63	38.00 0.0331 -29.61	66.00 0.0324 -29.80
-3.75 0.1155 -18.75	10.50 0.0782 -22.14	38.50 0.0411 -27.73	66.50 0.0394 -28.09
-3.50 0.1844 -15.68	11.00 0.0972 -20.25	39.00 0.0414 -27.65	67.00 0.0439 -27.16
-3.25 0.2103 -13.54	11.50 0.1116 -19.05	39.50 0.0340 -29.36	67.50 0.0456 -26.82
-3.00 0.2447 -12.23	12.00 0.1016 -19.86	40.00 0.0229 -32.79	68.00 0.0446 -27.01
-2.75 0.2619 -11.64	12.50 0.0753 -22.47	40.50 0.0194 -34.22	68.50 0.0411 -27.72
-2.50 0.2581 -11.76	13.00 0.0632 -23.98	41.00 0.0288 -30.80	69.00 0.0354 -29.03
-2.25 0.2322 -12.68	13.50 0.0794 -22.00	41.50 0.0384 -28.32	69.50 0.0279 -31.10
-2.00 0.1883 -14.50	14.00 0.0919 -20.74	42.00 0.0418 -27.58	70.00 0.0190 -34.41
-1.75 0.1451 -16.76	14.50 0.0843 -21.49	42.50 0.0377 -28.48	70.50 0.0095 -40.44
-1.50 0.1537 -16.26	15.00 0.0625 -24.08	43.00 0.0277 -31.15	71.00 0.0024 -52.39
-1.25 0.2370 -12.51	15.50 0.0520 -25.67	43.50 0.0181 -34.87	71.50 0.0108 -39.30
-1.00 0.3578 -8.93	16.00 0.0663 -23.57	44.00 0.0209 -33.59	72.00 0.0200 -33.97
-0.75 0.4916 -6.17	16.50 0.0783 -22.12	44.50 0.0315 -30.02	72.50 0.0284 -30.95
-0.50 0.6251 -4.08	17.00 0.0734 -22.69	45.00 0.0393 -28.10	73.00 0.0355 -28.98
-0.25 0.7483 -2.52	17.50 0.0551 -25.17	45.50 0.0408 -27.79	73.50 0.0414 -27.66
0.00 0.8532 -1.38	18.00 0.0440 -27.14	46.00 0.0355 -28.99	74.00 0.0458 -26.78
0.25 0.9329 -0.60	18.50 0.0553 -25.14	46.50 0.0254 -31.90	74.50 0.0488 -26.24
0.50 0.9827 -0.15	19.00 0.0673 -23.44	47.00 0.0164 -35.72	75.00 0.0502 -25.98
0.75 1.0000 0.00	19.50 0.0651 -23.73	47.50 0.0198 -34.08	75.50 0.0503 -25.96
1.00 0.9843 -0.14	20.00 0.0498 -26.05	48.00 0.0302 -30.39	76.00 0.0492 -26.16
1.25 0.9377 -0.56	20.50 0.0371 -28.61	48.50 0.0383 -28.35	76.50 0.0470 -26.56
1.50 0.8645 -1.26	21.00 0.0452 -26.89	49.00 0.0407 -27.80	77.00 0.0438 -27.16
1.75 0.7715 -2.25	21.50 0.0578 -24.76	49.50 0.0370 -28.62	77.50 0.0400 -27.96
2.00 0.6671 -3.52	22.00 0.0589 -24.60	50.00 0.0283 -30.96	78.00 0.0356 -28.98
2.25 0.5619 -5.01	22.50 0.0471 -26.54	50.50 0.0177 -35.03	78.50 0.0308 -30.24
2.50 0.4680 -6.60	23.00 0.0331 -29.61	51.00 0.0146 -36.70	79.00 0.0258 -31.77
2.75 0.3974 -8.02	23.50 0.0366 -28.73	51.50 0.0234 -32.60	79.50 0.0208 -33.65
3.00 0.3578 -8.93	24.00 0.0495 -26.10	52.00 0.0332 -29.58	80.00 0.0158 -35.01
3.25 0.3456 -9.23	24.50 0.0542 -25.32	52.50 0.0392 -28.14	80.50 0.0111 -39.00
3.50 0.3475 -9.18	25.00 0.0465 -26.85	53.00 0.0399 -27.99	81.00 0.0067 -43.46
3.75 0.3491 -9.14	25.50 0.0322 -29.83	53.50 0.0352 -29.06	81.50 0.0027 -51.28
4.00 0.3410 -9.35	26.00 0.0290 -30.74	54.00 0.0263 -31.60	82.00 0.0011 -58.88
4.25 0.3197 -9.90	26.50 0.0410 -27.75	54.50 0.0156 -36.14	82.50 0.0041 -47.75
4.50 0.2863 -10.86	27.00 0.0494 -26.12	55.00 0.0115 -38.76	83.00 0.0067 -43.50
4.75 0.2450 -12.22	27.50 0.0468 -26.59	55.50 0.0203 -33.86	83.50 0.0088 -41.15
5.00 0.2032 -13.84	28.00 0.0348 -29.17	56.00 0.0304 -30.33	84.00 0.0103 -39.71
5.25 0.1710 -15.34	28.50 0.0246 -32.18	56.50 0.0376 -28.48	84.50 0.0114 -38.86
5.50 0.1577 -16.05	29.00 0.0318 -29.96	57.00 0.0405 -27.84	85.00 0.0120 -38.41
5.75 0.1636 -15.73	29.50 0.0434 -27.25	57.50 0.0388 -28.23	85.50 0.0122 -38.31
6.00 0.1785 -14.97	30.00 0.0469 -26.58	58.00 0.0327 -29.71	86.00 0.0119 -38.50
6.25 0.1914 -14.36	30.50 0.0400 -27.96	58.50 0.0233 -32.65	86.50 0.0112 -38.98
6.50 0.1961 -14.15	31.00 0.0273 -31.27	59.00 0.0127 -37.95	87.00 0.0103 -39.77
6.75 0.1901 -14.42	31.50 0.0235 -32.59	59.50 0.0091 -40.82	87.50 0.0090 -40.91
7.00 0.1741 -15.18	32.00 0.0342 -29.31	60.00 0.0184 -34.71	88.00 0.0075 -42.50
7.25 0.1511 -16.41	32.50 0.0435 -27.23	60.50 0.0286 -30.88	88.50 0.0058 -44.74
7.50 0.1264 -17.97	33.00 0.0439 -27.16	61.00 0.0365 -28.76	89.00 0.0039 -48.08
7.75 0.1076 -19.37	33.50 0.0352 -29.07	61.50 0.0410 -27.75	89.50 0.0020 -53.99
8.00 0.1021 -19.82	34.00 0.0234 -32.61	62.00 0.0418 -27.59	90.00 0.0009 -59.99
8.25 0.1101 -19.16	34.50 0.0232 -32.70	62.50 0.0388 -28.22	
8.50 0.1238 -18.14	35.00 0.0341 -29.33	63.00 0.0325 -29.75	
8.75 0.1354 -17.37	35.50 0.0419 -27.55	63.50 0.0237 -32.51	

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