

## AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-70615-3**  
 Date **20-Dec-17**  
 Call Letters **WSYM**  
 Channel **28**  
 Frequency **557 MHz**  
 Antenna Type **TFU-24GTH-R BP290**  
 Gain **2.87 (4.58dB)**  
 Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.980	36	0.690	72	0.260	108	0.590	144	0.990	180	0.570	216	0.190	252	0.190	288	0.180	324	0.460
1	0.980	37	0.670	73	0.260	109	0.610	145	0.990	181	0.560	217	0.180	253	0.190	289	0.180	325	0.480
2	0.980	38	0.660	74	0.260	110	0.620	146	0.990	182	0.540	218	0.180	254	0.190	290	0.180	326	0.500
3	0.990	39	0.640	75	0.260	111	0.640	147	0.990	183	0.520	219	0.180	255	0.190	291	0.180	327	0.520
4	0.990	40	0.620	76	0.260	112	0.660	148	0.980	184	0.500	220	0.180	256	0.190	292	0.180	328	0.540
5	0.990	41	0.610	77	0.260	113	0.670	149	0.980	185	0.480	221	0.180	257	0.190	293	0.180	329	0.560
6	0.990	42	0.590	78	0.260	114	0.690	150	0.980	186	0.460	222	0.180	258	0.190	294	0.190	330	0.570
7	0.990	43	0.570	79	0.260	115	0.710	151	0.970	187	0.450	223	0.180	259	0.190	295	0.190	331	0.590
8	0.990	44	0.560	80	0.260	116	0.720	152	0.960	188	0.430	224	0.180	260	0.190	296	0.190	332	0.610
9	0.990	45	0.540	81	0.260	117	0.740	153	0.960	189	0.410	225	0.180	261	0.190	297	0.190	333	0.630
10	1.000	46	0.520	82	0.270	118	0.760	154	0.950	190	0.390	226	0.180	262	0.190	298	0.190	334	0.640
11	0.990	47	0.510	83	0.280	119	0.780	155	0.940	191	0.380	227	0.180	263	0.190	299	0.190	335	0.660
12	0.980	48	0.490	84	0.290	120	0.790	156	0.930	192	0.360	228	0.180	264	0.190	300	0.190	336	0.680
13	0.980	49	0.470	85	0.290	121	0.810	157	0.920	193	0.350	229	0.180	265	0.190	301	0.200	337	0.700
14	0.970	50	0.460	86	0.300	122	0.820	158	0.910	194	0.330	230	0.180	266	0.190	302	0.200	338	0.710
15	0.960	51	0.440	87	0.310	123	0.830	159	0.900	195	0.320	231	0.180	267	0.190	303	0.210	339	0.730
16	0.960	52	0.430	88	0.310	124	0.850	160	0.900	196	0.300	232	0.180	268	0.190	304	0.210	340	0.750
17	0.950	53	0.420	89	0.320	125	0.860	161	0.880	197	0.290	233	0.180	269	0.190	305	0.220	341	0.760
18	0.950	54	0.410	90	0.330	126	0.880	162	0.870	198	0.270	234	0.180	270	0.190	306	0.220	342	0.780
19	0.940	55	0.390	91	0.340	127	0.890	163	0.850	199	0.260	235	0.190	271	0.190	307	0.230	343	0.790
20	0.930	56	0.380	92	0.350	128	0.900	164	0.840	200	0.240	236	0.190	272	0.190	308	0.230	344	0.810
21	0.920	57	0.370	93	0.370	129	0.920	165	0.820	201	0.240	237	0.190	273	0.190	309	0.240	345	0.820
22	0.900	58	0.350	94	0.380	130	0.930	166	0.810	202	0.230	238	0.190	274	0.190	310	0.240	346	0.840
23	0.890	59	0.340	95	0.390	131	0.940	167	0.790	203	0.230	239	0.190	275	0.190	311	0.260	347	0.850
24	0.880	60	0.330	96	0.410	132	0.950	168	0.780	204	0.220	240	0.190	276	0.180	312	0.270	348	0.870
25	0.860	61	0.320	97	0.420	133	0.950	169	0.760	205	0.220	241	0.190	277	0.180	313	0.290	349	0.880
26	0.850	62	0.310	98	0.430	134	0.960	170	0.750	206	0.210	242	0.190	278	0.180	314	0.300	350	0.900
27	0.830	63	0.310	99	0.440	135	0.960	171	0.730	207	0.210	243	0.190	279	0.180	315	0.320	351	0.900
28	0.820	64	0.300	100	0.460	136	0.970	172	0.710	208	0.200	244	0.190	280	0.180	316	0.330	352	0.910
29	0.810	65	0.290	101	0.470	137	0.980	173	0.700	209	0.200	245	0.190	281	0.180	317	0.350	353	0.920
30	0.790	66	0.290	102	0.490	138	0.980	174	0.680	210	0.190	246	0.190	282	0.180	318	0.360	354	0.930
31	0.780	67	0.280	103	0.510	139	0.990	175	0.660	211	0.190	247	0.190	283	0.180	319	0.380	355	0.940
32	0.760	68	0.270	104	0.520	140	1.000	176	0.640	212	0.190	248	0.190	284	0.180	320	0.390	356	0.950
33	0.740	69	0.260	105	0.540	141	0.990	177	0.630	213	0.190	249	0.190	285	0.180	321	0.410	357	0.960
34	0.720	70	0.260	106	0.560	142	0.990	178	0.610	214	0.190	250	0.190	286	0.180	322	0.430	358	0.960
35	0.710	71	0.260	107	0.570	143	0.990	179	0.590	215	0.190	251	0.190	287	0.180	323	0.450	359	0.970

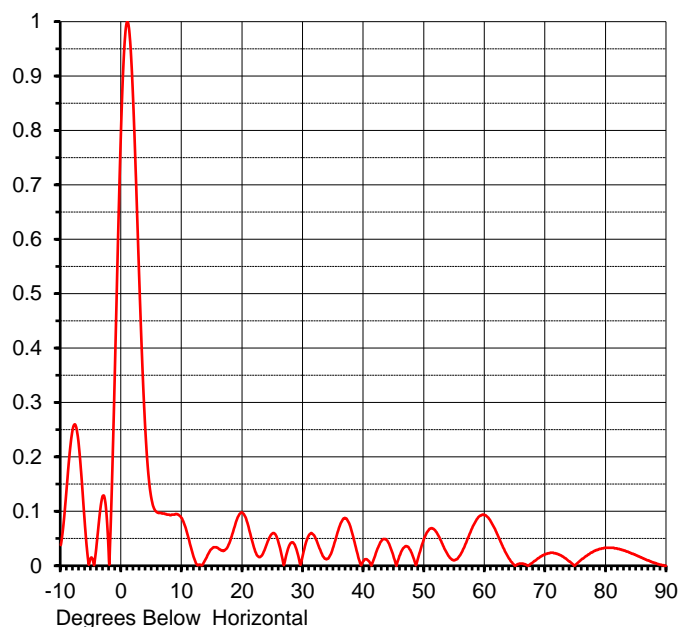
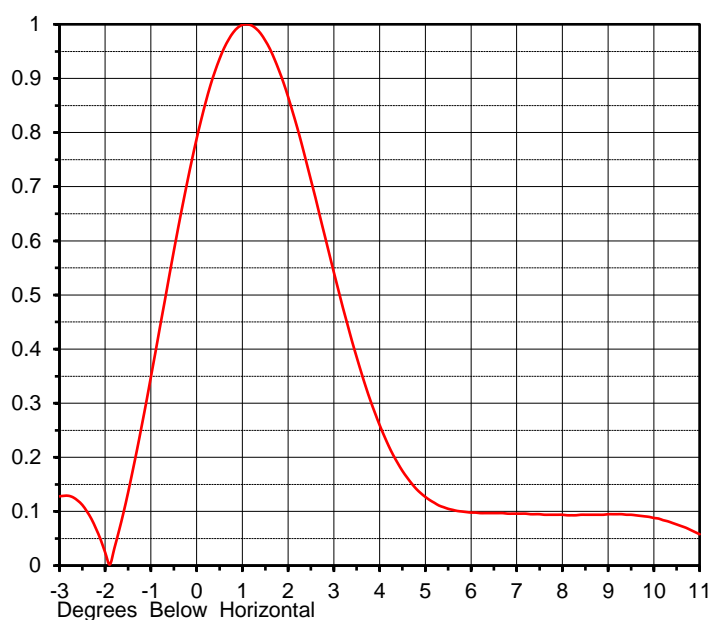
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## ELEVATION PATTERN

Proposal No. **C-70615-3**  
 Date **20-Dec-17**  
 Call Letters **WSYM**  
 Channel **28**  
 Frequency **557 MHz**  
 Antenna Type **TFU-24GTH-R BP290**

RMS Directivity at Main Lobe **20.0 ( 13.01 dB )**  
 RMS Directivity at Horizontal **13.6 ( 11.34 dB )**  
**Calculated**

Beam Tilt **1.00 deg**  
 Pattern Number **24G200100**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.038	10.0	0.087	30.0	0.022	50.0	0.051	70.0	0.021
-9.0	0.148	11.0	0.054	31.0	0.057	51.0	0.068	71.0	0.024
-8.0	0.253	12.0	0.014	32.0	0.052	52.0	0.062	72.0	0.022
-7.0	0.218	13.0	0.002	33.0	0.024	53.0	0.040	73.0	0.016
-6.0	0.072	14.0	0.014	34.0	0.013	54.0	0.018	74.0	0.008
-5.0	0.015	15.0	0.032	35.0	0.035	55.0	0.010	75.0	0.002
-4.0	0.049	16.0	0.032	36.0	0.072	56.0	0.021	76.0	0.012
-3.0	0.129	17.0	0.028	37.0	0.087	57.0	0.045	77.0	0.020
-2.0	0.002	18.0	0.047	38.0	0.064	58.0	0.072	78.0	0.027
-1.0	0.395	19.0	0.083	39.0	0.021	59.0	0.090	79.0	0.031
0.0	0.824	20.0	0.097	40.0	0.009	60.0	0.093	80.0	0.033
1.0	1.000	21.0	0.071	41.0	0.006	61.0	0.081	81.0	0.033
2.0	0.838	22.0	0.030	42.0	0.023	62.0	0.059	82.0	0.031
3.0	0.509	23.0	0.017	43.0	0.047	63.0	0.034	83.0	0.028
4.0	0.240	24.0	0.040	44.0	0.044	64.0	0.013	84.0	0.024
5.0	0.121	25.0	0.060	45.0	0.014	65.0	0.000	85.0	0.019
6.0	0.098	26.0	0.040	46.0	0.020	66.0	0.004	86.0	0.014
7.0	0.096	27.0	0.009	47.0	0.036	67.0	0.001	87.0	0.010
8.0	0.093	28.0	0.042	48.0	0.021	68.0	0.007	88.0	0.005
9.0	0.095	29.0	0.026	49.0	0.015	69.0	0.015	89.0	0.002
								90.0	0.000

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