



Proposal Number

Date

Call Letters

Location

Customer

Antenna Type

Revision

Exhibit 2

Channel

24

20 Jun 2002

KOKH-DT

Oklahoma City, OK

TFU-30GTH-R 6T170 DC

AZIMUTH PATTERN

RMS Gain at Main Lobe

Calculated / Measured

1.70 (2.30 dB)

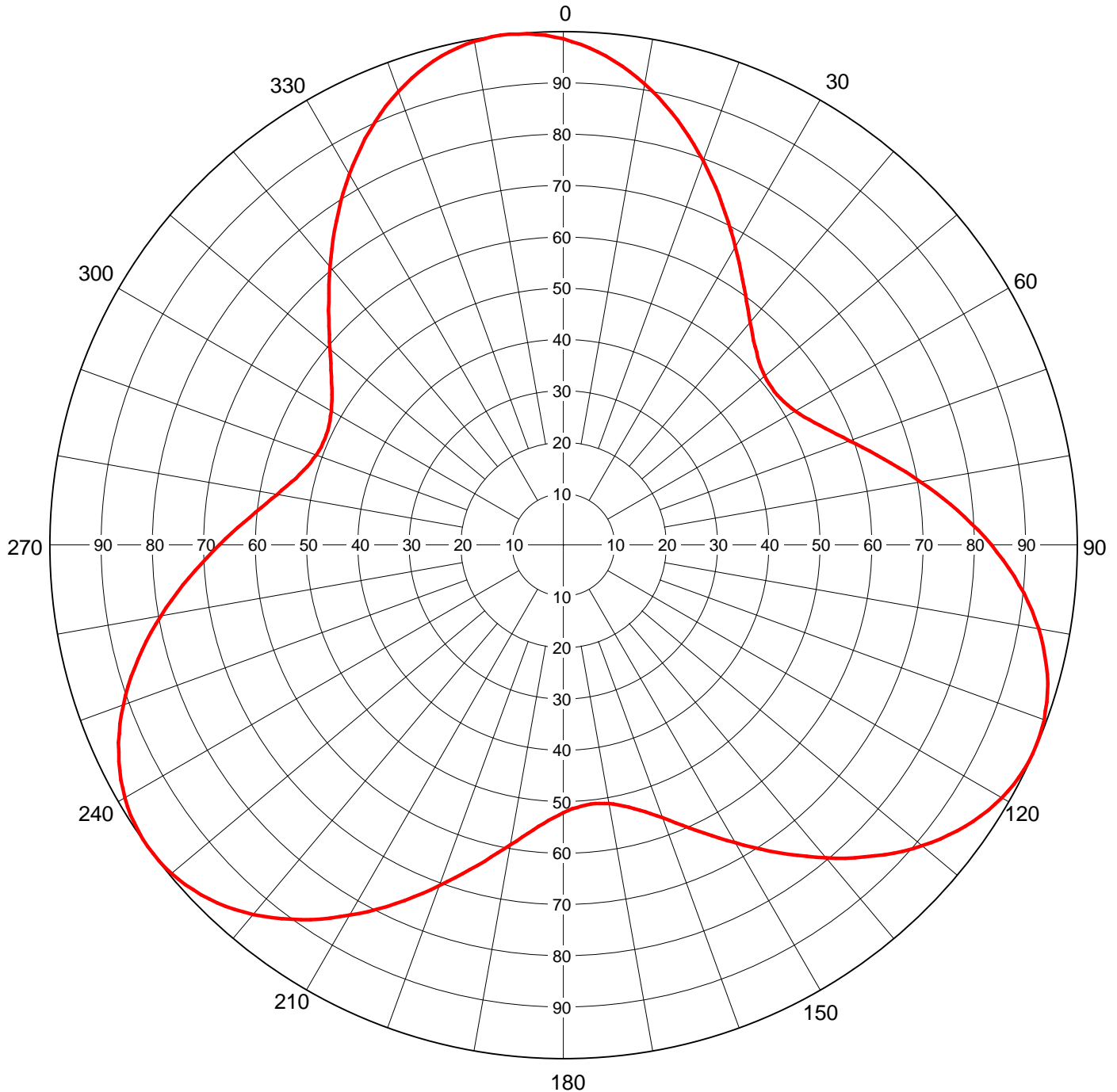
Calculated

Frequency

Drawing #

533 MHz

TFU-6T170-25-24



Remarks:



Proposal Number
 Date **20 Jun 2002** Revision **Exhibit 3**
 Call Letters **KOKH-DT** Channel **24**
 Location **Oklahoma City, OK**
 Customer
 Antenna Type **TFU-30GTH-R 6T170 DC**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **TFU-6T170-25-24**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.985	45	0.532	90	0.833	135	0.857	180	0.522	225	0.975	270	0.669	315	0.646
1	0.980	46	0.526	91	0.845	136	0.845	181	0.526	226	0.981	271	0.658	316	0.658
2	0.975	47	0.522	92	0.857	137	0.833	182	0.531	227	0.985	272	0.646	317	0.670
3	0.969	48	0.518	93	0.868	138	0.821	183	0.537	228	0.990	273	0.635	318	0.682
4	0.963	49	0.515	94	0.880	139	0.808	184	0.543	229	0.993	274	0.624	319	0.694
5	0.955	50	0.512	95	0.891	140	0.796	185	0.551	230	0.996	275	0.613	320	0.706
6	0.948	51	0.510	96	0.901	141	0.783	186	0.558	231	0.998	276	0.603	321	0.719
7	0.939	52	0.508	97	0.911	142	0.770	187	0.566	232	0.999	277	0.593	322	0.732
8	0.931	53	0.508	98	0.921	143	0.757	188	0.574	233	1.000	278	0.583	323	0.745
9	0.921	54	0.508	99	0.930	144	0.745	189	0.584	234	1.000	279	0.575	324	0.757
10	0.912	55	0.509	100	0.939	145	0.732	190	0.593	235	0.999	280	0.566	325	0.770
11	0.901	56	0.510	101	0.947	146	0.719	191	0.603	236	0.998	281	0.558	326	0.783
12	0.891	57	0.512	102	0.955	147	0.706	192	0.613	237	0.995	282	0.550	327	0.796
13	0.880	58	0.514	103	0.962	148	0.694	193	0.624	238	0.993	283	0.544	328	0.808
14	0.869	59	0.518	104	0.969	149	0.682	194	0.635	239	0.989	284	0.537	329	0.821
15	0.857	60	0.522	105	0.975	150	0.669	195	0.646	240	0.985	285	0.532	330	0.833
16	0.845	61	0.526	106	0.981	151	0.658	196	0.658	241	0.980	286	0.526	331	0.845
17	0.833	62	0.531	107	0.985	152	0.646	197	0.670	242	0.975	287	0.522	332	0.857
18	0.821	63	0.537	108	0.990	153	0.635	198	0.682	243	0.969	288	0.518	333	0.868
19	0.808	64	0.543	109	0.993	154	0.624	199	0.694	244	0.963	289	0.515	334	0.880
20	0.796	65	0.551	110	0.996	155	0.613	200	0.706	245	0.955	290	0.512	335	0.891
21	0.783	66	0.558	111	0.998	156	0.603	201	0.719	246	0.948	291	0.510	336	0.901
22	0.770	67	0.566	112	0.999	157	0.593	202	0.732	247	0.939	292	0.508	337	0.911
23	0.757	68	0.574	113	1.000	158	0.583	203	0.745	248	0.931	293	0.508	338	0.921
24	0.745	69	0.584	114	1.000	159	0.575	204	0.757	249	0.921	294	0.508	339	0.930
25	0.732	70	0.593	115	0.999	160	0.566	205	0.770	250	0.912	295	0.509	340	0.939
26	0.719	71	0.603	116	0.998	161	0.558	206	0.783	251	0.901	296	0.510	341	0.947
27	0.706	72	0.613	117	0.995	162	0.550	207	0.796	252	0.891	297	0.512	342	0.955
28	0.694	73	0.624	118	0.993	163	0.544	208	0.808	253	0.880	298	0.514	343	0.962
29	0.682	74	0.635	119	0.989	164	0.537	209	0.821	254	0.869	299	0.518	344	0.969
30	0.669	75	0.646	120	0.985	165	0.532	210	0.833	255	0.857	300	0.522	345	0.975
31	0.658	76	0.658	121	0.980	166	0.526	211	0.845	256	0.845	301	0.526	346	0.981
32	0.646	77	0.670	122	0.975	167	0.522	212	0.857	257	0.833	302	0.531	347	0.985
33	0.635	78	0.682	123	0.969	168	0.518	213	0.868	258	0.821	303	0.537	348	0.990
34	0.624	79	0.694	124	0.963	169	0.515	214	0.880	259	0.808	304	0.543	349	0.993
35	0.613	80	0.706	125	0.955	170	0.512	215	0.891	260	0.796	305	0.551	350	0.996
36	0.603	81	0.719	126	0.948	171	0.510	216	0.901	261	0.783	306	0.558	351	0.998
37	0.593	82	0.732	127	0.939	172	0.508	217	0.911	262	0.770	307	0.566	352	0.999
38	0.583	83	0.745	128	0.931	173	0.508	218	0.921	263	0.757	308	0.574	353	1.000
39	0.575	84	0.757	129	0.921	174	0.508	219	0.930	264	0.745	309	0.584	354	1.000
40	0.566	85	0.770	130	0.912	175	0.509	220	0.939	265	0.732	310	0.593	355	0.999
41	0.558	86	0.783	131	0.901	176	0.510	221	0.947	266	0.719	311	0.603	356	0.998
42	0.550	87	0.796	132	0.891	177	0.512	222	0.955	267	0.706	312	0.613	357	0.995
43	0.544	88	0.808	133	0.880	178	0.514	223	0.962	268	0.694	313	0.624	358	0.993
44	0.537	89	0.821	134	0.869	179	0.518	224	0.969	269	0.682	314	0.635	359	0.989

Remarks:



Proposal Number

Date

Call Letters

Location

Customer

Antenna Type

Revision

20 Jun 2002

Exhibit 4A

Channel **24**

Oklahoma City, OK

TFU-30GTH-R 6T170 DC

ELEVATION PATTERN

RMS Gain at Main Lobe

24.5 (13.89 dB)

Beam Tilt

0.75 Degrees

RMS Gain at Horizontal

17.0 (12.30 dB)

Frequency

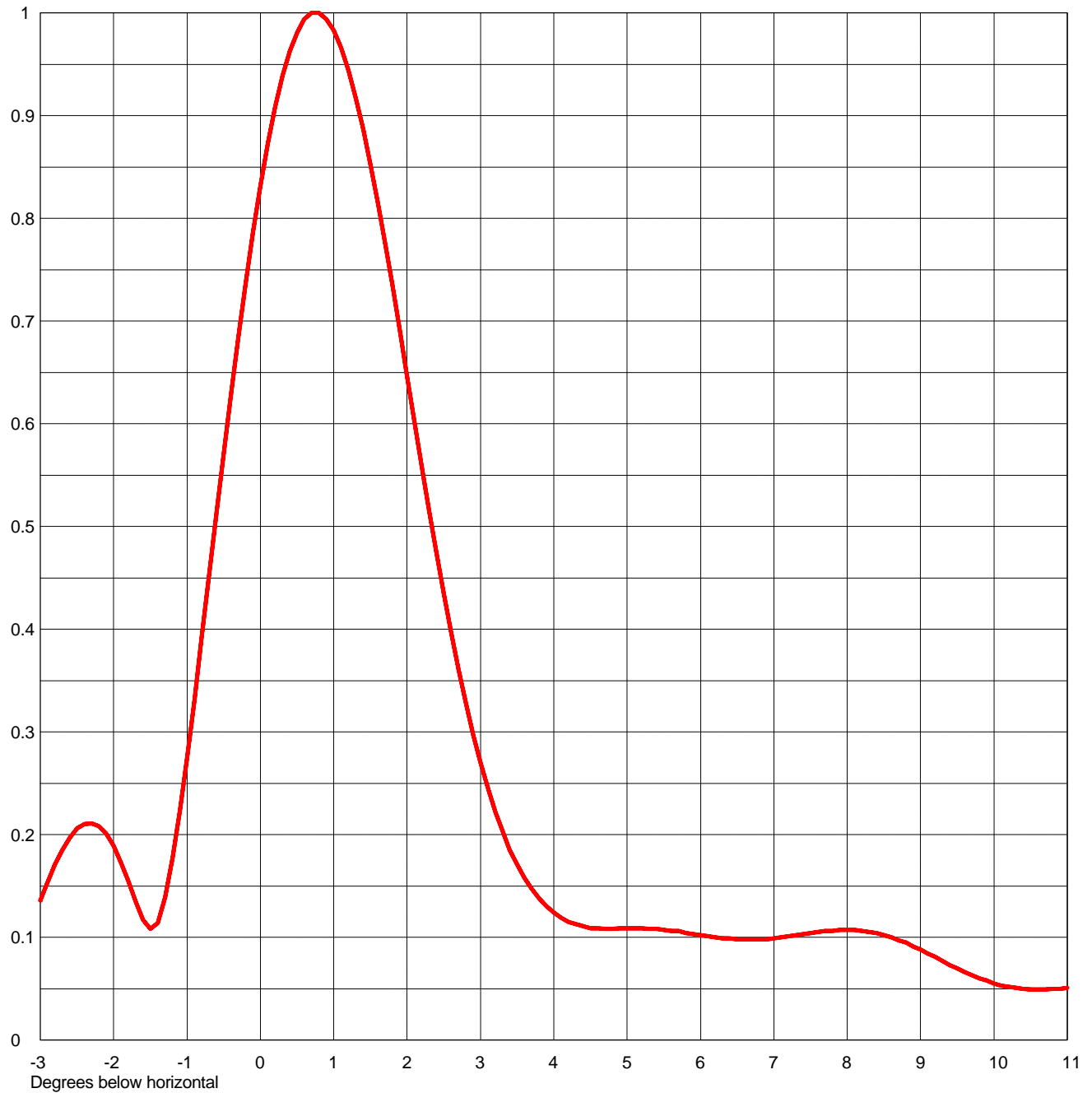
533.00 MHz

Calculated / Measured

Calculated

Drawing #

30G245075



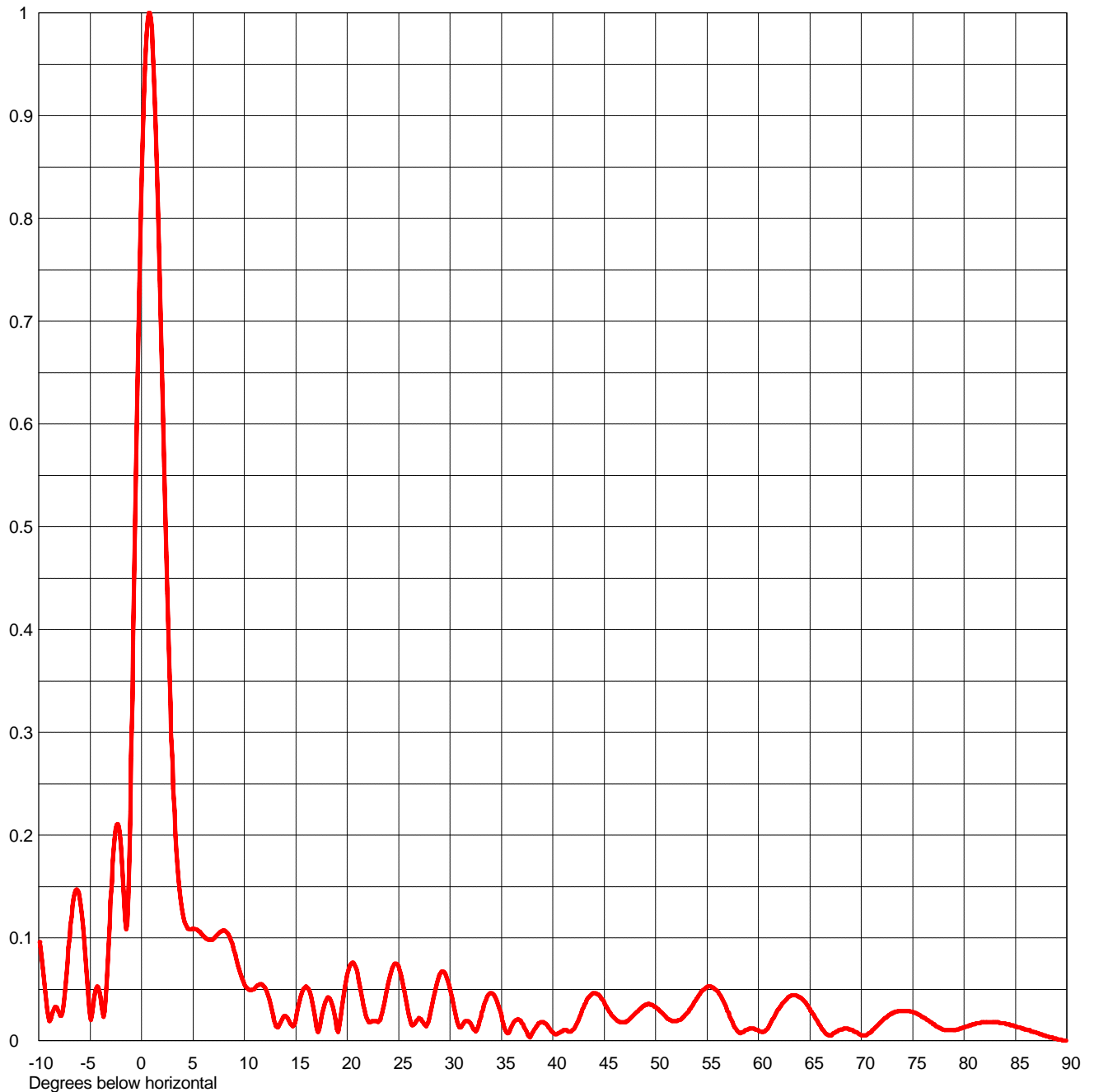
Remarks:



Proposal Number			
Date	20 Jun 2002	Revision	Exhibit 4B
Call Letters	KOKH-DT	Channel	24
Location	Oklahoma City, OK		
Customer			
Antenna Type	TFU-30GTH-R 6T170 DC		

ELEVATION PATTERN

RMS Gain at Main Lobe	24.5 (13.89 dB)	Beam Tilt	0.75 Degrees
RMS Gain at Horizontal	17.0 (12.30 dB)	Frequency	533.00 MHz
Calculated / Measured	Calculated	Drawing #	30G245075



Remarks:



Proposal Number
 Date **20 Jun 2002** Revision **Exhibit 5**
 Call Letters **KOKH-DT** Channel **24**
 Location **Oklahoma City, OK**
 Customer
 Antenna Type **TFU-30GTH-R 6T170 DC**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **30G245075**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.103	2.4	0.475	10.6	0.049	30.5	0.027	51.0	0.023	71.5	0.014
-9.5	0.060	2.6	0.397	10.8	0.050	31.0	0.013	51.5	0.020	72.0	0.019
-9.0	0.019	2.8	0.328	11.0	0.051	31.5	0.019	52.0	0.019	72.5	0.023
-8.5	0.031	3.0	0.270	11.5	0.055	32.0	0.017	52.5	0.021	73.0	0.026
-8.0	0.027	3.2	0.222	12.0	0.052	32.5	0.009	53.0	0.026	73.5	0.028
-7.5	0.043	3.4	0.185	12.5	0.037	33.0	0.023	53.5	0.033	74.0	0.029
-7.0	0.101	3.6	0.158	13.0	0.016	33.5	0.039	54.0	0.041	74.5	0.029
-6.5	0.143	3.8	0.138	13.5	0.017	34.0	0.046	54.5	0.048	75.0	0.028
-6.0	0.138	4.0	0.124	14.0	0.024	34.5	0.040	55.0	0.052	75.5	0.026
-5.5	0.086	4.2	0.115	14.5	0.016	35.0	0.024	55.5	0.052	76.0	0.023
-5.0	0.022	4.4	0.111	15.0	0.021	35.5	0.008	56.0	0.048	76.5	0.020
-4.5	0.047	4.6	0.109	15.5	0.043	36.0	0.014	56.5	0.040	77.0	0.016
-4.0	0.043	4.8	0.108	16.0	0.053	36.5	0.020	57.0	0.029	77.5	0.013
-3.5	0.041	5.0	0.109	16.5	0.042	37.0	0.017	57.5	0.018	78.0	0.011
-3.0	0.136	5.2	0.109	17.0	0.015	37.5	0.008	58.0	0.009	78.5	0.010
-2.8	0.171	5.4	0.108	17.5	0.022	38.0	0.007	58.5	0.008	79.0	0.010
-2.6	0.197	5.6	0.106	18.0	0.040	38.5	0.015	59.0	0.011	79.5	0.011
-2.4	0.210	5.8	0.104	18.5	0.036	39.0	0.018	59.5	0.012	80.0	0.013
-2.2	0.208	6.0	0.102	19.0	0.012	39.5	0.015	60.0	0.010	80.5	0.015
-2.0	0.189	6.2	0.100	19.5	0.032	40.0	0.008	60.5	0.009	81.0	0.016
-1.8	0.155	6.4	0.099	20.0	0.064	40.5	0.007	61.0	0.014	81.5	0.017
-1.6	0.117	6.6	0.098	20.5	0.076	41.0	0.010	61.5	0.022	82.0	0.018
-1.4	0.114	6.8	0.098	21.0	0.065	41.5	0.009	62.0	0.031	82.5	0.018
-1.2	0.177	7.0	0.099	21.5	0.040	42.0	0.011	62.5	0.038	83.0	0.018
-1.0	0.276	7.2	0.101	22.0	0.020	42.5	0.020	63.0	0.043	83.5	0.017
-0.8	0.391	7.4	0.103	22.5	0.019	43.0	0.033	63.5	0.044	84.0	0.017
-0.6	0.511	7.6	0.105	23.0	0.018	43.5	0.042	64.0	0.042	84.5	0.015
-0.4	0.628	7.8	0.106	23.5	0.031	44.0	0.046	64.5	0.038	85.0	0.014
-0.2	0.737	8.0	0.107	24.0	0.056	44.5	0.044	65.0	0.031	85.5	0.013
0.0	0.832	8.2	0.106	24.5	0.073	45.0	0.037	65.5	0.023	86.0	0.011
0.2	0.909	8.4	0.104	25.0	0.072	45.5	0.028	66.0	0.015	86.5	0.009
0.4	0.963	8.6	0.100	25.5	0.052	46.0	0.022	66.5	0.007	87.0	0.008
0.6	0.994	8.8	0.095	26.0	0.025	46.5	0.018	67.0	0.005	87.5	0.006
0.8	1.000	9.0	0.088	26.5	0.016	47.0	0.018	67.5	0.008	88.0	0.004
1.0	0.983	9.2	0.081	27.0	0.022	47.5	0.021	68.0	0.011	88.5	0.003
1.2	0.944	9.4	0.073	27.5	0.016	48.0	0.026	68.5	0.012	89.0	0.002
1.4	0.887	9.6	0.066	28.0	0.022	48.5	0.031	69.0	0.011	89.5	0.001
1.6	0.815	9.8	0.060	28.5	0.046	49.0	0.035	69.5	0.008	90.0	0.000
1.8	0.734	10.0	0.055	29.0	0.064	49.5	0.035	70.0	0.005		
2.0	0.647	10.2	0.052	29.5	0.066	50.0	0.033	70.5	0.005		
2.2	0.559	10.4	0.050	30.0	0.051	50.5	0.028	71.0	0.009		

Remarks: