

EXHIBIT 7  
(Page 1 of 8)

CONSTRUCTED FACILITIES  
Second Generation of Iowa, Ltd.  
Cedar Rapids, IA

The KFXA-DT construction permit authorizes the use of a Dielectric TFU-36GTH-R 4P210 DC circularly polarized directional antenna with its center of radiation located 453 meters above ground. The antenna which was installed, however, is a Dielectric TFU-30GTH-R 4P210 DC horizontally polarized directional antenna, which is shared with KFXA's Channel 28 analog facilities and has an identical radiation pattern to the antenna authorized by the KFXA-DT construction permit. This antenna modification is permitted without prior FCC authorization by Section 73.1690(c)(3) of the FCC Rules since there is no change in the authorized antenna height or radiation pattern and there are no co-channel of first adjacent land mobile operations located within 341 kilometers of the KFXA-DT transmitter site. Complete pattern information for the installed antenna is included in Appendix A to this exhibit.

This exhibit also serves to clarify several of the operating constants specified in Paragraph 2 of the "Tech Box" portion of Section III of FCC Form 302-DTV. The Channel 27 operation of KFXA-DT is combined into a common antenna with the modified Channel 28 facilities authorized for KFXA(TV) by construction permit BPCT-20050228ACE. Since FCC Form 302-DTV makes no provisions to include the insertion loss of antenna switches and/or combiners, it was necessary to combine the 0.45 dB insertion loss for the combiner and the antenna switch which were installed with the 1.03 dB of transmission line loss and insert the sum of these two values (1.48 dB) in the block labeled "transmission line power loss" in Question 2 of the "Tech Box" portion of Section III of FCC Form 302-DTV.

EXHIBIT 7  
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The constructed KFXA-DT facilities fully comply with the current FCC Standard with regard to human exposure to nonionizing radiation. Equation (2), found on Page 30 of Supplement A to OET Bulletin 65, details the calculation technique used to determine the power density at the base of a TV broadcast tower. In this case, however, it is necessary to substitute the proposed average DTV effective radiated power (100 kilowatts) for the expression  $[0.4ERP_V + ERP_A]$  in this equation to compensate for the fact that DTV power levels are expressed in terms of average power, rather than peak power, as is the case for the visual portion of an analog TV signal. Using the vertical radiation pattern data for this antenna from Appendix A of this exhibit, this equation yields a maximum predicted power density at two meters above ground level of  $0.32 \mu\text{W}/\text{cm}^2$  which occurs at a depression angle of  $55.5^\circ$  below horizontal and at a distance of 308.5 meters from the base of this tower. Since the maximum permitted power density for uncontrolled exposure on TV Channel 27 is  $365.3 \mu\text{W}/\text{cm}^2$ , this amounts to only 0.09% of the permitted level for uncontrolled exposure. Since this is less than 5% of the permitted level, the KFXA-DT facilities are excluded from environmental processing and need not be considered in conjunction with other co-located and nearby facilities in evaluating uncontrolled exposure compliance with this FCC Standard.

KFXA-DT, in conjunction with the KFXA analog facilities, will also take appropriate steps to insure that workers who must climb this tower will not be exposed to power densities exceeding the permitted levels for controlled exposure. These steps will include a reduction in power or the cessation of operation, as appropriate, by either or both of these stations, as appropriate, at any time that workers must be on this tower in any area where the total power density exceeds the permitted level for controlled exposure.

## APPENDIX A

### KFXA-DT Antenna Information

Proposal Number **DCA-10772** Revision: **1**  
 Date **6-Dec-04**  
 Call Letters **KFXA-DT** Channel **27**  
 Location **Ceder Rapids, IA**  
 Customer  
 Antenna Type **TFU-30GTH-R 4P210 DC**

## ELEVATION PATTERN

RMS Gain at Main Lobe

**24.50 ( 13.89 dB )**

Beam Tilt

**0.75 deg**

RMS Gain at Horizontal

**17.00 ( 12.30 dB )**

Frequency

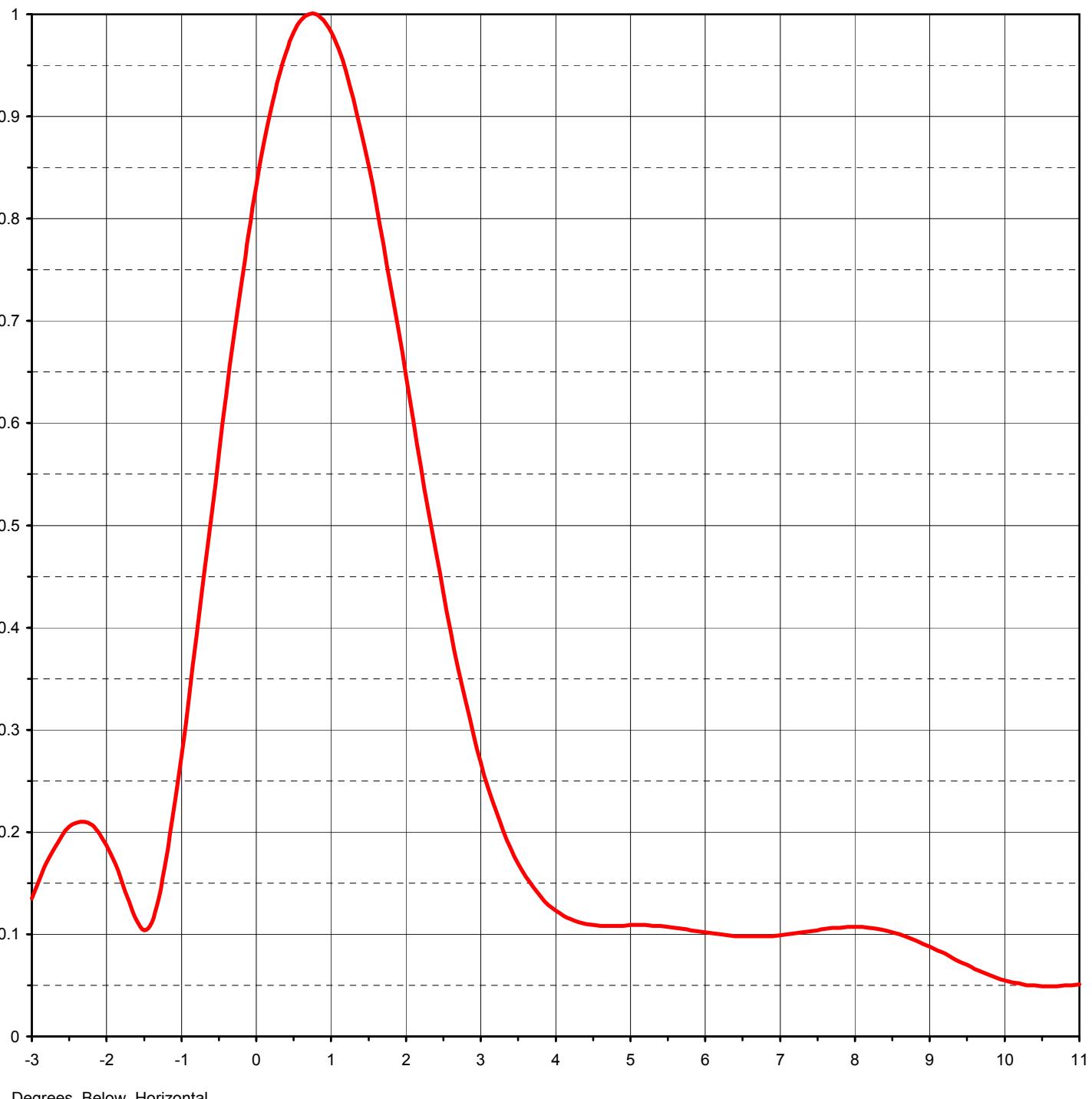
**551.00 MHz**

Calculated / Measured

**Calculated**

Drawing #

**30G245075**

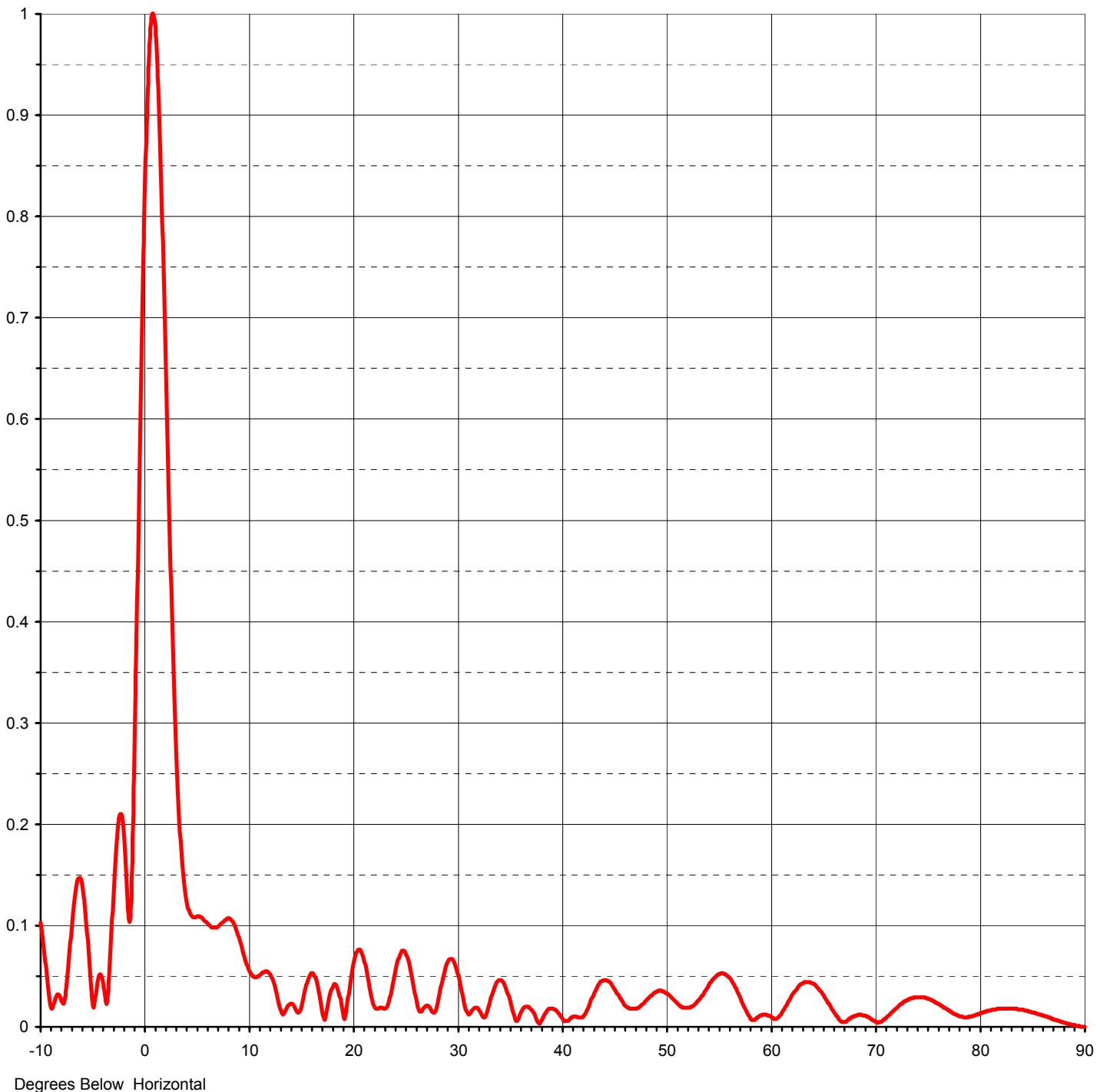




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Location **Ceder Rapids, IA**  
Customer  
Antenna Type **TFU-30GTH-R 4P210 DC**

## ELEVATION PATTERN

RMS Gain at Main Lobe **24.50 ( 13.89 dB )** Beam Tilt **0.75 deg**  
RMS Gain at Horizontal **17.00 ( 12.30 dB )** Frequency **551.00 MHz**  
Calculated / Measured **Calculated** Drawing # **30G245075-90**



Degrees Below Horizontal



Proposal Number **DCA-10772** Revision: **1**  
Date **6-Dec-04**  
Call Letters **KFXA-DT** Channel **27**  
Location **Ceder Rapids, IA**  
Customer  
Antenna Type **TFU-30GTH-R 4P210 DC**

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **30G245075-90**

Angle	Field										
-10.0	0.103	2.4	0.474	10.6	0.049	30.5	0.032	51.0	0.024	71.5	0.014
-9.5	0.060	2.6	0.396	10.8	0.049	31.0	0.013	51.5	0.020	72.0	0.019
-9.0	0.019	2.8	0.327	11.0	0.050	31.5	0.017	52.0	0.019	72.5	0.023
-8.5	0.030	3.0	0.268	11.5	0.054	32.0	0.018	52.5	0.020	73.0	0.026
-8.0	0.026	3.2	0.221	12.0	0.053	32.5	0.009	53.0	0.025	73.5	0.028
-7.5	0.043	3.4	0.184	12.5	0.041	33.0	0.020	53.5	0.031	74.0	0.029
-7.0	0.101	3.6	0.156	13.0	0.020	33.5	0.037	54.0	0.039	74.5	0.029
-6.5	0.143	3.8	0.137	13.5	0.015	34.0	0.046	54.5	0.047	75.0	0.028
-6.0	0.139	4.0	0.123	14.0	0.023	34.5	0.042	55.0	0.052	75.5	0.025
-5.5	0.087	4.2	0.115	14.5	0.018	35.0	0.028	55.5	0.053	76.0	0.023
-5.0	0.022	4.4	0.110	15.0	0.017	35.5	0.010	56.0	0.049	76.5	0.019
-4.5	0.047	4.6	0.108	15.5	0.039	36.0	0.012	56.5	0.042	77.0	0.016
-4.0	0.043	4.8	0.108	16.0	0.053	36.5	0.020	57.0	0.031	77.5	0.013
-3.5	0.040	5.0	0.109	16.5	0.046	37.0	0.018	57.5	0.019	78.0	0.010
-3.0	0.135	5.2	0.109	17.0	0.020	37.5	0.009	58.0	0.010	78.5	0.009
-2.8	0.170	5.4	0.108	17.5	0.016	38.0	0.005	58.5	0.007	79.0	0.010
-2.6	0.196	5.6	0.106	18.0	0.038	38.5	0.014	59.0	0.011	79.5	0.011
-2.4	0.209	5.8	0.104	18.5	0.039	39.0	0.018	59.5	0.012	80.0	0.013
-2.2	0.207	6.0	0.102	19.0	0.017	39.5	0.016	60.0	0.010	80.5	0.015
-2.0	0.187	6.2	0.100	19.5	0.025	40.0	0.009	60.5	0.008	81.0	0.016
-1.8	0.152	6.4	0.098	20.0	0.059	40.5	0.006	61.0	0.012	81.5	0.017
-1.6	0.114	6.6	0.098	20.5	0.076	41.0	0.009	61.5	0.021	82.0	0.018
-1.4	0.111	6.8	0.098	21.0	0.069	41.5	0.009	62.0	0.030	82.5	0.018
-1.2	0.175	7.0	0.099	21.5	0.045	42.0	0.009	62.5	0.037	83.0	0.018
-1.0	0.275	7.2	0.101	22.0	0.021	42.5	0.018	63.0	0.042	83.5	0.018
-0.8	0.390	7.4	0.103	22.5	0.018	43.0	0.030	63.5	0.044	84.0	0.017
-0.6	0.510	7.6	0.105	23.0	0.018	43.5	0.041	64.0	0.043	84.5	0.016
-0.4	0.628	7.8	0.106	23.5	0.026	44.0	0.046	64.5	0.038	85.0	0.014
-0.2	0.737	8.0	0.107	24.0	0.051	44.5	0.045	65.0	0.031	85.5	0.013
0.0	0.832	8.2	0.106	24.5	0.071	45.0	0.038	65.5	0.023	86.0	0.011
0.2	0.909	8.4	0.104	25.0	0.074	45.5	0.030	66.0	0.014	86.5	0.009
0.4	0.963	8.6	0.100	25.5	0.057	46.0	0.022	66.5	0.007	87.0	0.008
0.6	0.994	8.8	0.094	26.0	0.030	46.5	0.018	67.0	0.005	87.5	0.006
0.8	1.000	9.0	0.088	26.5	0.015	47.0	0.018	67.5	0.008	88.0	0.004
1.0	0.983	9.2	0.081	27.0	0.021	47.5	0.020	68.0	0.011	88.5	0.003
1.2	0.944	9.4	0.073	27.5	0.017	48.0	0.025	68.5	0.012	89.0	0.002
1.4	0.886	9.6	0.066	28.0	0.018	48.5	0.030	69.0	0.011	89.5	0.001
1.6	0.815	9.8	0.063	28.5	0.042	49.0	0.034	69.5	0.008	90.0	0.000
1.8	0.733	10.0	0.057	29.0	0.062	49.5	0.036	70.0	0.005		
2.0	0.646	10.2	0.053	29.5	0.067	50.0	0.033	70.5	0.005		
2.2	0.558	10.4	0.050	30.0	0.055	50.5	0.029	71.0	0.009		

Proposal Number

**DCA-10772**Revision: **1**

Date

**6-Dec-04**

Call Letters

**KFXA-DT**

Channel

Location

**Ceder Rapids, IA**

Customer

Antenna Type

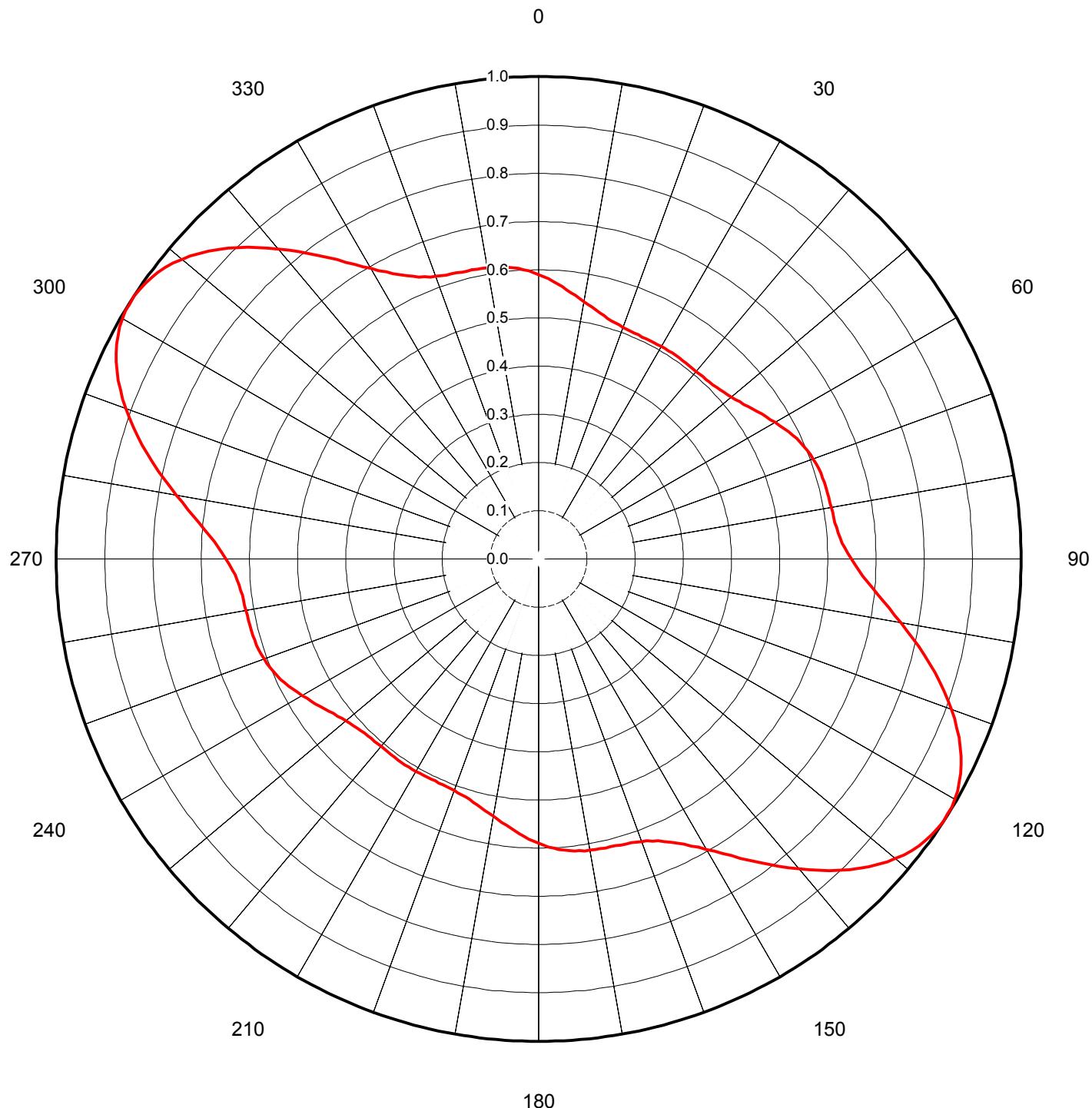
**TFU-30GTH-R 4P210 DC**

### AZIMUTH PATTERN

Gain **2.10**  
 Calculated / Measured **( 3.22 dB)**  
**Calculated**

Frequency  
 Drawing #

**551.00 MHz**  
**TFU-4P210-5510**





Proposal Number

**DCA-10772**

Revision:

**1**

Date

**6-Dec-04**

Call Letters

**KFXA-DT**

Channel

**27**

Location

**Ceder Rapids, IA**

Customer

**TFU-30GTH-R 4P210 DC**

Antenna Type

**TABULATION OF AZIMUTH PATTERN**Azimuth Pattern Drawing #: **TFU-4P210-5510**

Angle	Field																
0	0.590	45	0.511	90	0.648	135	0.911	180	0.590	225	0.511	270	0.648	315	0.911		
1	0.586	46	0.513	91	0.655	136	0.897	181	0.586	226	0.513	271	0.655	316	0.897		
2	0.581	47	0.514	92	0.664	137	0.883	182	0.581	227	0.514	272	0.664	317	0.883		
3	0.576	48	0.516	93	0.673	138	0.869	183	0.576	228	0.516	273	0.673	318	0.869		
4	0.571	49	0.519	94	0.684	139	0.854	184	0.571	229	0.519	274	0.684	319	0.854		
5	0.566	50	0.522	95	0.695	140	0.839	185	0.566	230	0.522	275	0.695	320	0.839		
6	0.561	51	0.525	96	0.707	141	0.823	186	0.561	231	0.525	276	0.707	321	0.823		
7	0.556	52	0.529	97	0.720	142	0.808	187	0.556	232	0.529	277	0.720	322	0.808		
8	0.551	53	0.533	98	0.734	143	0.792	188	0.551	233	0.533	278	0.734	323	0.792		
9	0.546	54	0.537	99	0.748	144	0.777	189	0.546	234	0.537	279	0.748	324	0.777		
10	0.541	55	0.541	100	0.762	145	0.762	190	0.541	235	0.541	280	0.762	325	0.762		
11	0.537	56	0.546	101	0.777	146	0.748	191	0.537	236	0.546	281	0.777	326	0.748		
12	0.533	57	0.551	102	0.793	147	0.733	192	0.533	237	0.551	282	0.793	327	0.733		
13	0.529	58	0.556	103	0.808	148	0.720	193	0.529	238	0.556	283	0.808	328	0.720		
14	0.525	59	0.561	104	0.823	149	0.707	194	0.525	239	0.561	284	0.823	329	0.707		
15	0.522	60	0.566	105	0.839	150	0.695	195	0.522	240	0.566	285	0.839	330	0.695		
16	0.519	61	0.571	106	0.854	151	0.683	196	0.519	241	0.571	286	0.854	331	0.683		
17	0.516	62	0.576	107	0.869	152	0.673	197	0.516	242	0.576	287	0.869	332	0.673		
18	0.514	63	0.581	108	0.883	153	0.664	198	0.514	243	0.581	288	0.883	333	0.664		
19	0.512	64	0.585	109	0.897	154	0.655	199	0.512	244	0.585	289	0.897	334	0.655		
20	0.511	65	0.590	110	0.911	155	0.647	200	0.511	245	0.590	290	0.911	335	0.647		
21	0.510	66	0.594	111	0.924	156	0.641	201	0.510	246	0.594	291	0.924	336	0.641		
22	0.509	67	0.597	112	0.935	157	0.635	202	0.509	247	0.597	292	0.935	337	0.635		
23	0.508	68	0.600	113	0.947	158	0.631	203	0.508	248	0.600	293	0.947	338	0.631		
24	0.508	69	0.603	114	0.957	159	0.626	204	0.508	249	0.603	294	0.957	339	0.626		
25	0.508	70	0.606	115	0.966	160	0.623	205	0.508	250	0.606	295	0.966	340	0.623		
26	0.508	71	0.608	116	0.974	161	0.621	206	0.508	251	0.608	296	0.974	341	0.621		
27	0.508	72	0.610	117	0.982	162	0.619	207	0.508	252	0.610	297	0.982	342	0.619		
28	0.508	73	0.611	118	0.987	163	0.617	208	0.508	253	0.611	298	0.987	343	0.617		
29	0.508	74	0.612	119	0.993	164	0.616	209	0.508	254	0.612	299	0.993	344	0.616		
30	0.508	75	0.613	120	0.996	165	0.615	210	0.508	255	0.613	300	0.996	345	0.615		
31	0.508	76	0.614	121	0.999	166	0.615	211	0.508	256	0.614	301	0.999	346	0.615		
32	0.508	77	0.614	122	0.999	167	0.615	212	0.508	257	0.614	302	0.999	347	0.615		
33	0.508	78	0.615	123	1.000	168	0.614	213	0.508	258	0.615	303	1.000	348	0.614		
34	0.508	79	0.615	124	0.998	169	0.614	214	0.508	259	0.615	304	0.998	349	0.614		
35	0.508	80	0.616	125	0.996	170	0.613	215	0.508	260	0.616	305	0.996	350	0.613		
36	0.508	81	0.616	126	0.992	171	0.612	216	0.508	261	0.616	306	0.992	351	0.612		
37	0.508	82	0.617	127	0.988	172	0.611	217	0.508	262	0.617	307	0.988	352	0.611		
38	0.508	83	0.619	128	0.981	173	0.610	218	0.508	263	0.619	308	0.981	353	0.610		
39	0.508	84	0.621	129	0.975	174	0.608	219	0.508	264	0.621	309	0.975	354	0.608		
40	0.508	85	0.623	130	0.966	175	0.606	220	0.508	265	0.623	310	0.966	355	0.606		
41	0.508	86	0.627	131	0.957	176	0.603	221	0.508	266	0.627	311	0.957	356	0.603		
42	0.509	87	0.630	132	0.946	177	0.601	222	0.509	267	0.630	312	0.946	357	0.601		
43	0.509	88	0.636	133	0.936	178	0.597	223	0.509	268	0.636	313	0.936	358	0.597		
44	0.510	89	0.641	134	0.923	179	0.594	224	0.510	269	0.641	314	0.923	359	0.594		