



Proposal Number
Date
Call Letters
Location
Customer
Antenna Type

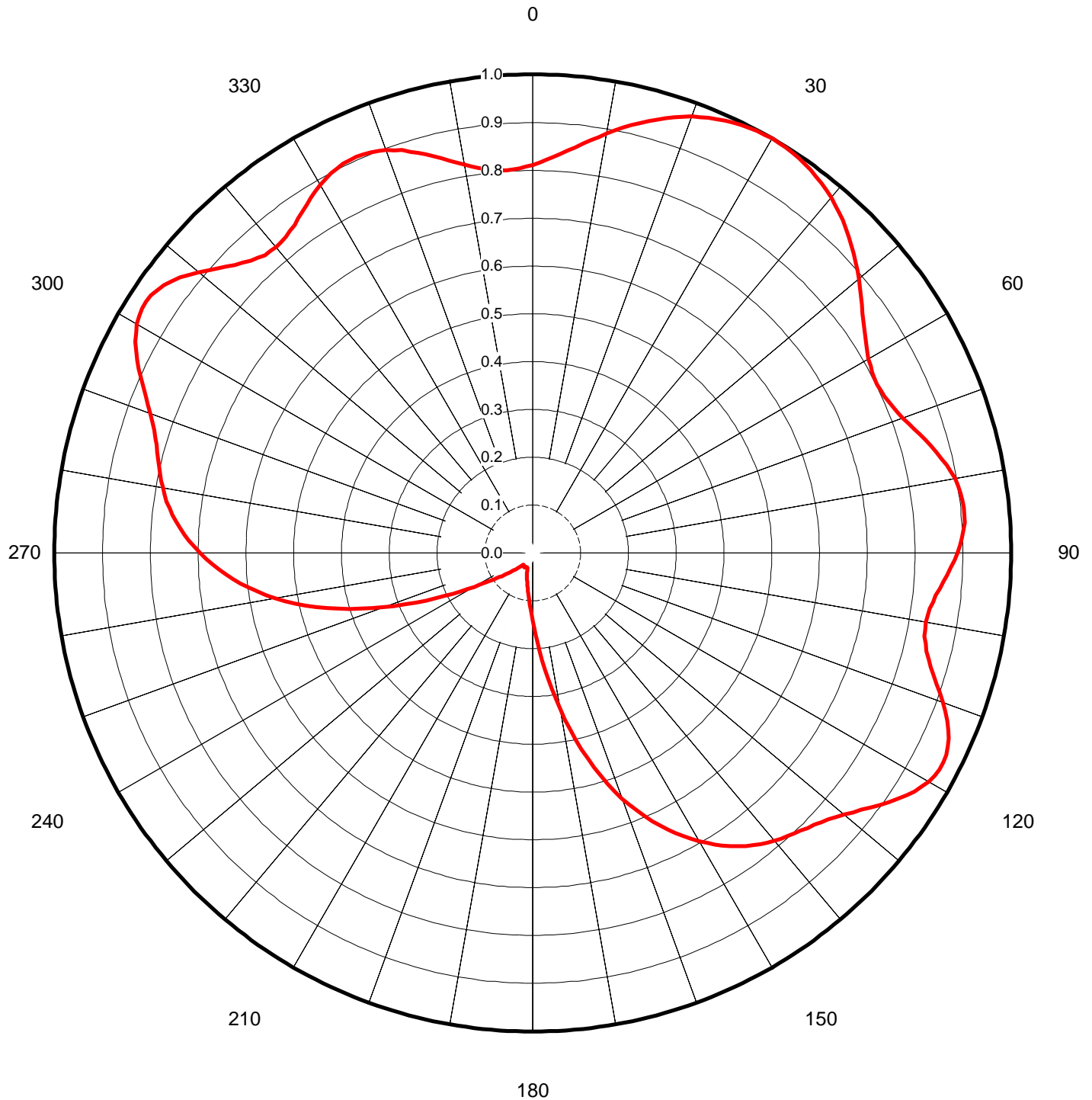
DCA-8570
7-Jun-00
WTVZ-DT
Norfolk, VA
Sinclair
TFU-20DSC-R 3C180SP

Revision: **1**
Exhibit ONE
Channel **38**

AZIMUTH PATTERN

Gain **1.80** **(2.55 dB)**
Calculated / Measured **Calculated**

Frequency **617.00 MHz**
Drawing # **TFU-3C180SP-38**





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DCA-8570
7-Jun-00
WTVZ-DT
Norfolk, VA
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TFU-20DSC-R 3C180SP

Revision: **1**
Exhibit TWO
Channel **38**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TFU-3C180SP-38**

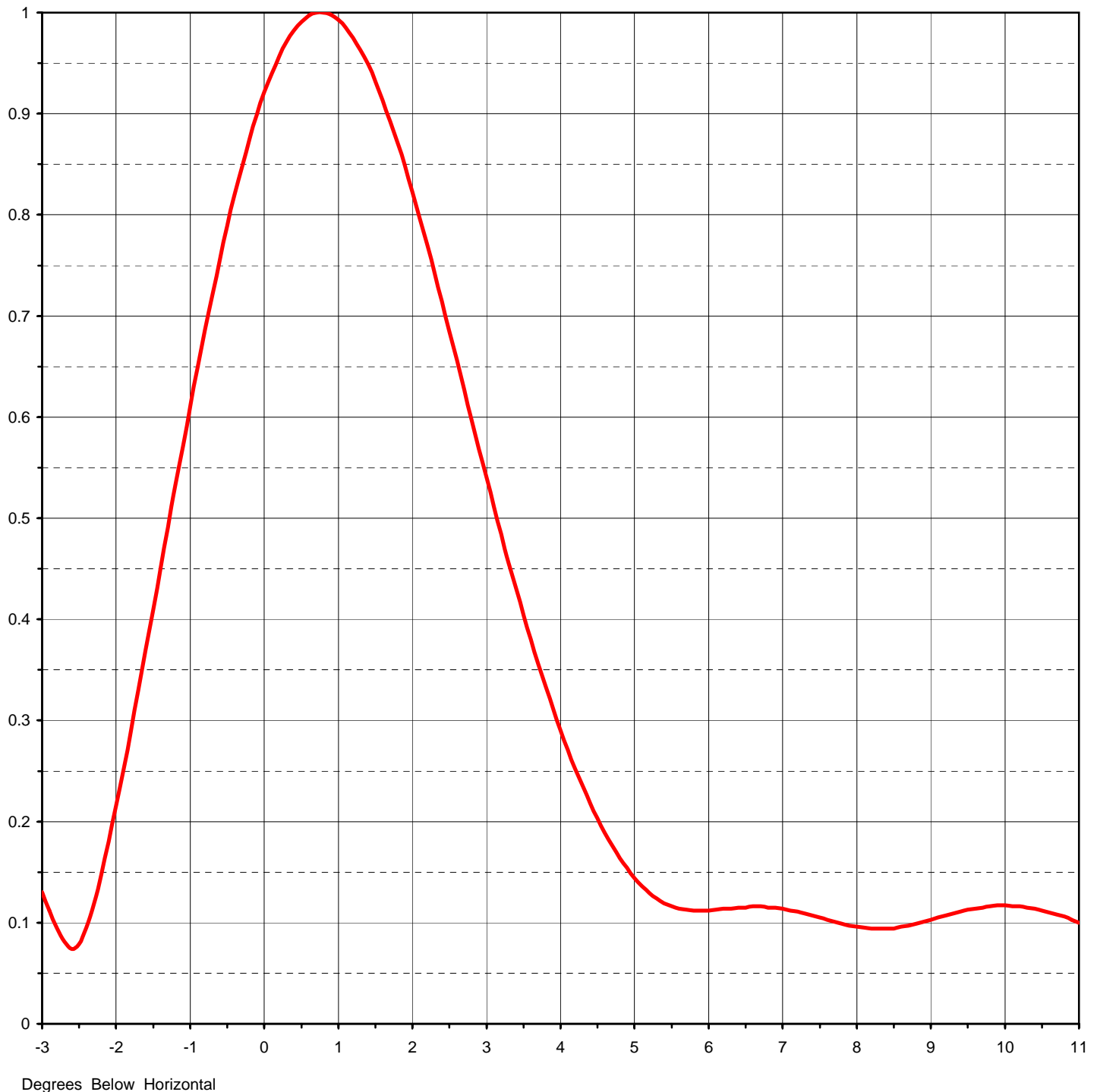
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.810	45	0.934	90	0.888	135	0.812	180	0.142	225	0.046	270	0.695	315	0.857
1	0.816	46	0.926	91	0.881	136	0.806	181	0.130	226	0.050	271	0.707	316	0.848
2	0.821	47	0.917	92	0.875	137	0.801	182	0.118	227	0.053	272	0.718	317	0.843
3	0.828	48	0.908	93	0.868	138	0.796	183	0.109	228	0.057	273	0.729	318	0.837
4	0.836	49	0.899	94	0.861	139	0.791	184	0.100	229	0.061	274	0.739	319	0.836
5	0.844	50	0.889	95	0.854	140	0.785	185	0.093	230	0.066	275	0.748	320	0.834
6	0.852	51	0.880	96	0.848	141	0.779	186	0.086	231	0.070	276	0.757	321	0.836
7	0.861	52	0.871	97	0.843	142	0.773	187	0.080	232	0.075	277	0.765	322	0.838
8	0.871	53	0.861	98	0.838	143	0.765	188	0.075	233	0.080	278	0.773	323	0.843
9	0.880	54	0.852	99	0.836	144	0.757	189	0.070	234	0.086	279	0.779	324	0.848
10	0.889	55	0.844	100	0.834	145	0.748	190	0.066	235	0.093	280	0.785	325	0.854
11	0.899	56	0.836	101	0.836	146	0.739	191	0.061	236	0.100	281	0.791	326	0.861
12	0.908	57	0.828	102	0.837	147	0.729	192	0.057	237	0.109	282	0.796	327	0.868
13	0.917	58	0.821	103	0.843	148	0.718	193	0.053	238	0.118	283	0.801	328	0.875
14	0.926	59	0.816	104	0.848	149	0.707	194	0.050	239	0.130	284	0.806	329	0.881
15	0.934	60	0.810	105	0.857	150	0.695	195	0.046	240	0.142	285	0.812	330	0.888
16	0.942	61	0.807	106	0.866	151	0.683	196	0.043	241	0.156	286	0.818	331	0.893
17	0.950	62	0.803	107	0.877	152	0.670	197	0.040	242	0.171	287	0.825	332	0.898
18	0.957	63	0.802	108	0.888	153	0.656	198	0.037	243	0.188	288	0.832	333	0.901
19	0.964	64	0.801	109	0.900	154	0.643	199	0.035	244	0.205	289	0.841	334	0.905
20	0.970	65	0.803	110	0.912	155	0.628	200	0.033	245	0.225	290	0.850	335	0.906
21	0.975	66	0.804	111	0.924	156	0.613	201	0.033	246	0.244	291	0.861	336	0.907
22	0.981	67	0.808	112	0.935	157	0.597	202	0.032	247	0.266	292	0.872	337	0.905
23	0.985	68	0.812	113	0.943	158	0.581	203	0.032	248	0.287	293	0.884	338	0.903
24	0.989	69	0.818	114	0.952	159	0.564	204	0.032	249	0.309	294	0.896	339	0.900
25	0.992	70	0.824	115	0.957	160	0.546	205	0.033	250	0.332	295	0.908	340	0.896
26	0.995	71	0.831	116	0.962	161	0.527	206	0.033	251	0.355	296	0.920	341	0.890
27	0.997	72	0.838	117	0.963	162	0.508	207	0.034	252	0.378	297	0.930	342	0.884
28	0.999	73	0.846	118	0.964	163	0.487	208	0.035	253	0.400	298	0.941	343	0.877
29	0.999	74	0.854	119	0.960	164	0.467	209	0.035	254	0.423	299	0.948	344	0.870
30	1.000	75	0.862	120	0.956	165	0.445	210	0.035	255	0.445	300	0.956	345	0.862
31	0.999	76	0.870	121	0.948	166	0.423	211	0.035	256	0.467	301	0.960	346	0.854
32	0.999	77	0.877	122	0.941	167	0.400	212	0.035	257	0.487	302	0.964	347	0.846
33	0.997	78	0.884	123	0.930	168	0.378	213	0.034	258	0.508	303	0.963	348	0.838
34	0.995	79	0.890	124	0.920	169	0.355	214	0.033	259	0.527	304	0.962	349	0.831
35	0.992	80	0.896	125	0.908	170	0.332	215	0.033	260	0.546	305	0.957	350	0.824
36	0.989	81	0.900	126	0.896	171	0.309	216	0.032	261	0.564	306	0.952	351	0.818
37	0.985	82	0.903	127	0.884	172	0.287	217	0.032	262	0.581	307	0.943	352	0.812
38	0.981	83	0.905	128	0.872	173	0.266	218	0.032	263	0.597	308	0.935	353	0.808
39	0.975	84	0.907	129	0.861	174	0.244	219	0.033	264	0.613	309	0.924	354	0.804
40	0.970	85	0.906	130	0.850	175	0.225	220	0.033	265	0.628	310	0.912	355	0.803
41	0.964	86	0.905	131	0.841	176	0.205	221	0.035	266	0.643	311	0.900	356	0.801
42	0.957	87	0.901	132	0.832	177	0.188	222	0.037	267	0.656	312	0.888	357	0.802
43	0.950	88	0.898	133	0.825	178	0.171	223	0.040	268	0.670	313	0.877	358	0.803
44	0.942	89	0.893	134	0.818	179	0.156	224	0.043	269	0.683	314	0.866	359	0.807



Proposal Number	DCA-8570	Revision:	1
Date	7-Jun-00	Exhibit THREE	
Call Letters	WTVZ-DT	Channel	38
Location	Norfolk, VA		
Customer	Sinclair		
Antenna Type	TFU-20DSC-R 3C180SP		

ELEVATION PATTERN

RMS Gain at Main Lobe	15.50 (11.90 dB)	Beam Tilt	0.75 deg
RMS Gain at Horizontal	13.10 (11.17 dB)	Frequency	617.00 MHz
Calculated / Measured	Calculated	Drawing #	20Q155075



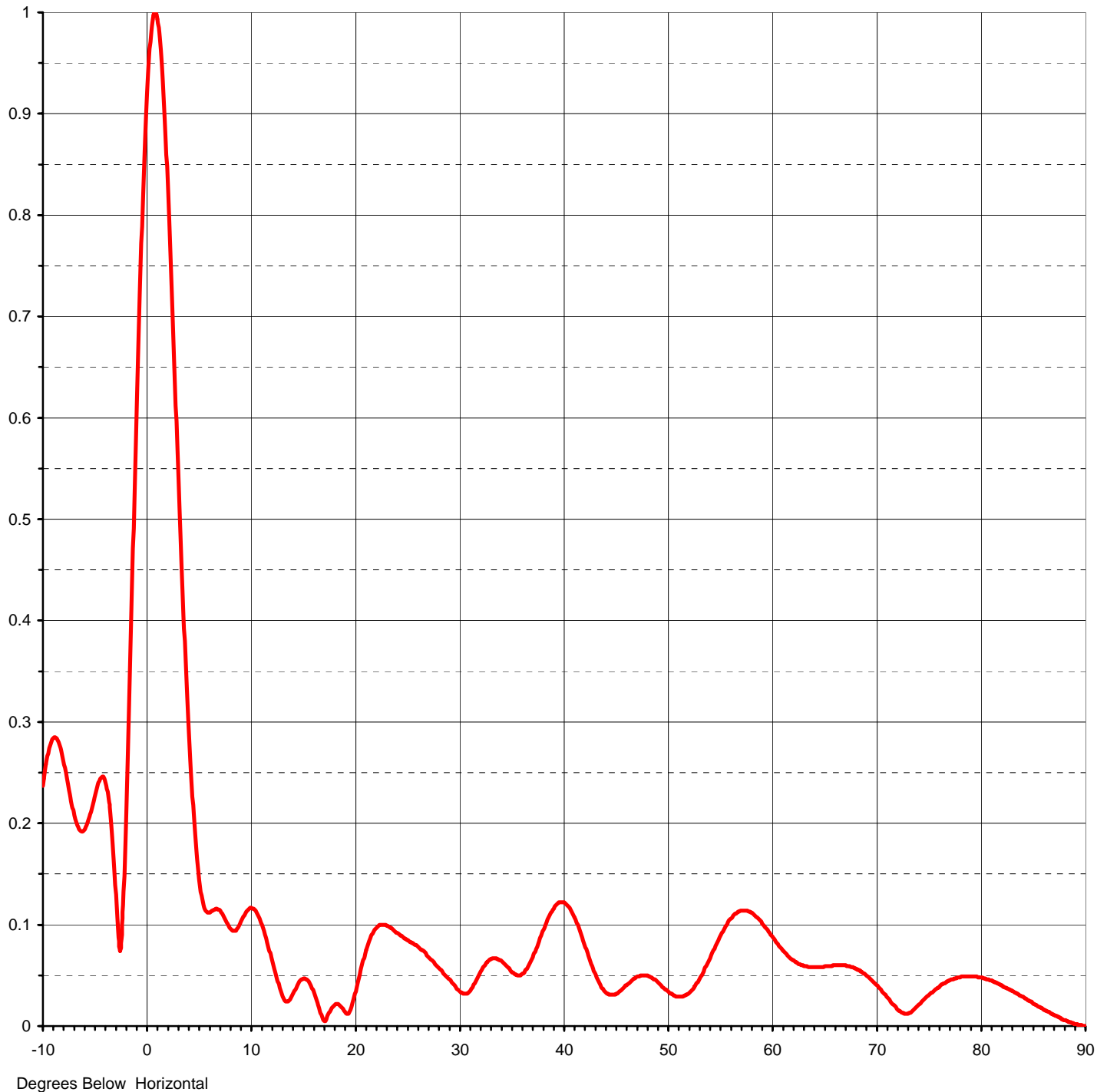


Proposal Number	DCA-8570	Revision:	1
Date	7-Jun-00	Exhibit FOUR	
Call Letters	WTVZ-DT	Channel	38
Location	Norfolk, VA		
Customer	Sinclair		
Antenna Type	TFU-20DSC-R 3C180SP		

ELEVATION PATTERN

RMS Gain at Main Lobe	15.50 (11.90 dB)
RMS Gain at Horizontal	13.10 (11.17 dB)
Calculated / Measured	Calculated

Beam Tilt	0.75 deg
Frequency	617.00 MHz
Drawing #	20Q155075-90





Proposal Number **DCA-8570** Revision: **1**
 Date **7-Jun-00** **Exhibit FIVE**
 Call Letters **WTVZ-DT** Channel **38**
 Location **Norfolk, VA**
 Customer **Sinclair**
 Antenna Type **TFU-20DSC-R 3C180SP**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **20Q155075-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.237	2.4	0.714	10.6	0.112	30.5	0.032	51.0	0.029	71.5	0.022
-9.5	0.269	2.6	0.656	10.8	0.108	31.0	0.034	51.5	0.029	72.0	0.016
-9.0	0.284	2.8	0.597	11.0	0.103	31.5	0.042	52.0	0.032	72.5	0.013
-8.5	0.280	3.0	0.540	11.5	0.087	32.0	0.052	52.5	0.037	73.0	0.012
-8.0	0.260	3.2	0.484	12.0	0.068	32.5	0.060	53.0	0.045	73.5	0.016
-7.5	0.233	3.4	0.430	12.5	0.049	33.0	0.066	53.5	0.054	74.0	0.021
-7.0	0.208	3.6	0.380	13.0	0.032	33.5	0.067	54.0	0.065	74.5	0.026
-6.5	0.194	3.8	0.333	13.5	0.024	34.0	0.065	54.5	0.076	75.0	0.031
-6.0	0.194	4.0	0.290	14.0	0.030	34.5	0.060	55.0	0.087	75.5	0.035
-5.5	0.207	4.2	0.252	14.5	0.040	35.0	0.054	55.5	0.097	76.0	0.039
-5.0	0.227	4.4	0.218	15.0	0.046	35.5	0.051	56.0	0.105	76.5	0.042
-4.5	0.244	4.6	0.189	15.5	0.045	36.0	0.051	56.5	0.111	77.0	0.045
-4.0	0.241	4.8	0.164	16.0	0.036	36.5	0.056	57.0	0.114	77.5	0.047
-3.5	0.205	5.0	0.144	16.5	0.021	37.0	0.066	57.5	0.114	78.0	0.048
-3.0	0.130	5.2	0.129	17.0	0.006	37.5	0.078	58.0	0.112	78.5	0.049
-2.8	0.095	5.4	0.119	17.5	0.012	38.0	0.092	58.5	0.108	79.0	0.049
-2.6	0.074	5.6	0.114	18.0	0.020	38.5	0.105	59.0	0.103	79.5	0.049
-2.4	0.095	5.8	0.112	18.5	0.021	39.0	0.115	59.5	0.096	80.0	0.048
-2.2	0.148	6.0	0.112	19.0	0.015	39.5	0.121	60.0	0.089	80.5	0.046
-2.0	0.215	6.2	0.114	19.5	0.014	40.0	0.122	60.5	0.082	81.0	0.045
-1.8	0.290	6.4	0.115	20.0	0.030	40.5	0.118	61.0	0.076	81.5	0.042
-1.6	0.370	6.6	0.116	20.5	0.051	41.0	0.109	61.5	0.070	82.0	0.040
-1.4	0.451	6.8	0.115	21.0	0.071	41.5	0.097	62.0	0.065	82.5	0.037
-1.2	0.532	7.0	0.114	21.5	0.086	42.0	0.082	62.5	0.062	83.0	0.035
-1.0	0.611	7.2	0.111	22.0	0.096	42.5	0.067	63.0	0.060	83.5	0.032
-0.8	0.686	7.4	0.107	22.5	0.100	43.0	0.053	63.5	0.058	84.0	0.029
-0.6	0.756	7.6	0.103	23.0	0.100	43.5	0.042	64.0	0.058	84.5	0.025
-0.4	0.820	7.8	0.099	23.5	0.097	44.0	0.034	64.5	0.058	85.0	0.022
-0.2	0.875	8.0	0.096	24.0	0.092	44.5	0.031	65.0	0.059	85.5	0.019
0.0	0.921	8.2	0.094	24.5	0.089	45.0	0.031	65.5	0.059	86.0	0.016
0.2	0.957	8.4	0.094	25.0	0.085	45.5	0.035	66.0	0.060	86.5	0.014
0.4	0.982	8.6	0.096	25.5	0.082	46.0	0.040	66.5	0.060	87.0	0.011
0.6	0.997	8.8	0.099	26.0	0.079	46.5	0.044	67.0	0.060	87.5	0.008
0.8	1.000	9.0	0.103	26.5	0.075	47.0	0.048	67.5	0.058	88.0	0.006
1.0	0.993	9.2	0.107	27.0	0.069	47.5	0.050	68.0	0.056	88.5	0.004
1.2	0.975	9.4	0.111	27.5	0.064	48.0	0.050	68.5	0.054	89.0	0.002
1.4	0.949	9.6	0.114	28.0	0.058	48.5	0.048	69.0	0.050	89.5	0.001
1.6	0.913	9.8	0.115	28.5	0.052	49.0	0.044	69.5	0.045	90.0	0.000
1.8	0.871	10.0	0.117	29.0	0.047	49.5	0.039	70.0	0.040		
2.0	0.823	10.2	0.116	29.5	0.041	50.0	0.035	70.5	0.034		
2.2	0.770	10.4	0.115	30.0	0.035	50.5	0.031	71.0	0.028		