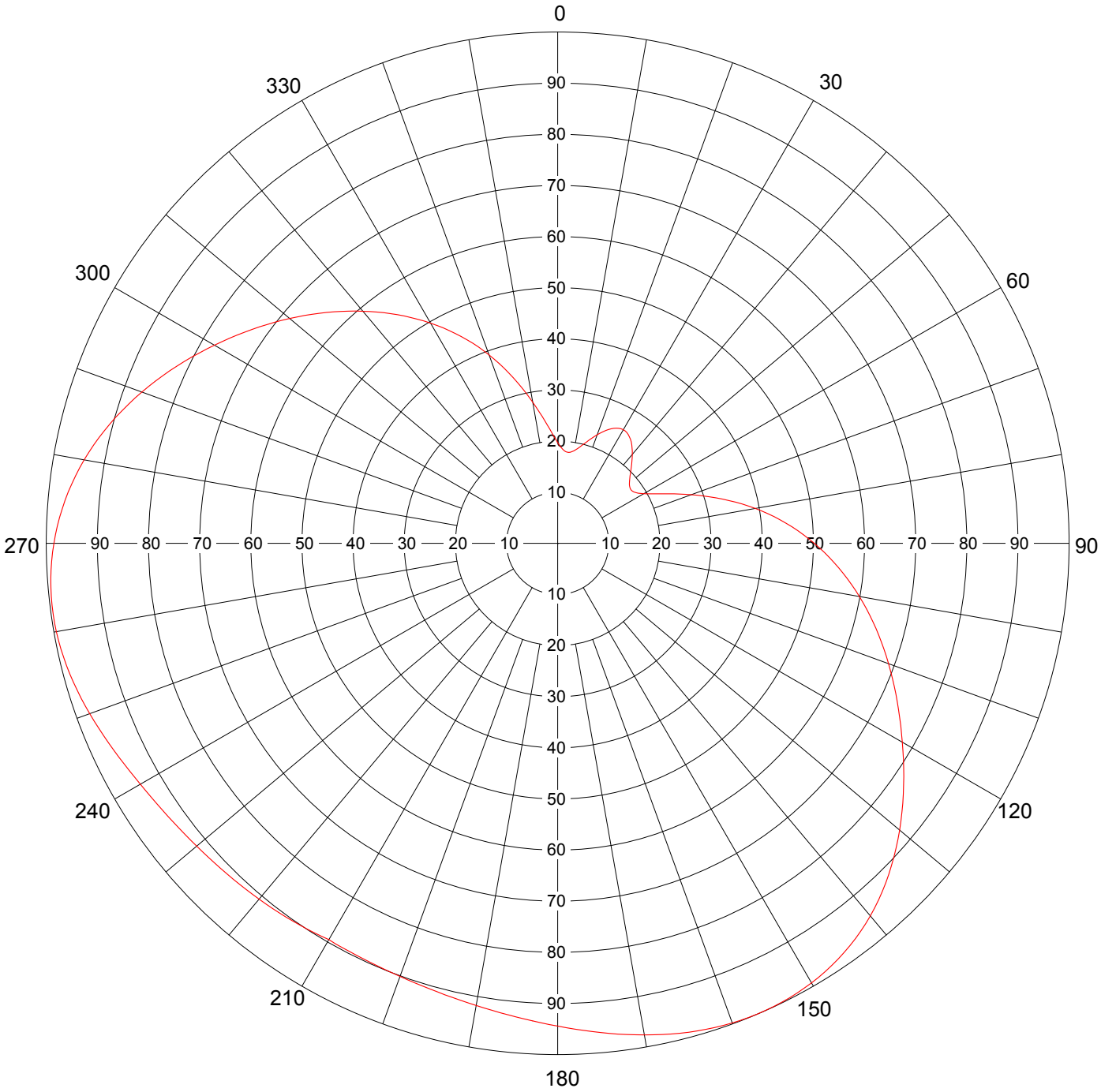
Exhibit No.
1a

Dielectric

Date	**28 Mar 2003**		
Call Letters	**WXXI-DT**	Channel	**16**
Location			
Customer			
Antenna Type	**TFU-16DSB-M**		

AZIMUTH PATTERN

Gain	**1.90 (2.79 dB)**	Frequency	**485 MHz**
Calculated / Measured	**Calculated**	Drawing #	**DSB-M**



Remarks:

Exhibit No.
1b

Dielectric

Date **28 Mar 2003**
Call Letters **WXXI-DT** Channel **16**
Location
Customer
Antenna Type **TFU-16DSB-M**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **DSB-M**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.197	45	0.202	90	0.502	135	0.916	180	0.944	225	0.914	270	0.985	315	0.639
1	0.192	46	0.198	91	0.512	136	0.923	181	0.941	226	0.916	271	0.982	316	0.630
2	0.188	47	0.194	92	0.522	137	0.931	182	0.938	227	0.917	272	0.979	317	0.620
3	0.184	48	0.190	93	0.532	138	0.938	183	0.935	228	0.918	273	0.975	318	0.611
4	0.182	49	0.186	94	0.542	139	0.945	184	0.933	229	0.920	274	0.971	319	0.602
5	0.180	50	0.183	95	0.552	140	0.951	185	0.930	230	0.921	275	0.967	320	0.593
6	0.179	51	0.181	96	0.561	141	0.957	186	0.927	231	0.923	276	0.962	321	0.583
7	0.179	52	0.179	97	0.571	142	0.963	187	0.925	232	0.925	277	0.957	322	0.574
8	0.180	53	0.178	98	0.580	143	0.968	188	0.922	233	0.926	278	0.952	323	0.565
9	0.182	54	0.178	99	0.590	144	0.972	189	0.920	234	0.928	279	0.946	324	0.555
10	0.184	55	0.178	100	0.599	145	0.977	190	0.918	235	0.930	280	0.940	325	0.546
11	0.187	56	0.180	101	0.608	146	0.981	191	0.916	236	0.932	281	0.934	326	0.536
12	0.190	57	0.182	102	0.617	147	0.984	192	0.914	237	0.935	282	0.927	327	0.527
13	0.194	58	0.185	103	0.626	148	0.987	193	0.912	238	0.937	283	0.920	328	0.517
14	0.198	59	0.189	104	0.635	149	0.990	194	0.910	239	0.940	284	0.913	329	0.507
15	0.202	60	0.194	105	0.644	150	0.993	195	0.908	240	0.942	285	0.906	330	0.497
16	0.207	61	0.200	106	0.653	151	0.995	196	0.907	241	0.945	286	0.898	331	0.487
17	0.211	62	0.206	107	0.662	152	0.996	197	0.905	242	0.948	287	0.890	332	0.477
18	0.216	63	0.214	108	0.671	153	0.998	198	0.904	243	0.951	288	0.882	333	0.467
19	0.221	64	0.221	109	0.680	154	0.999	199	0.903	244	0.954	289	0.874	334	0.457
20	0.226	65	0.229	110	0.688	155	1.000	200	0.901	245	0.958	290	0.865	335	0.446
21	0.231	66	0.238	111	0.697	156	1.000	201	0.900	246	0.961	291	0.857	336	0.436
22	0.235	67	0.248	112	0.706	157	1.000	202	0.899	247	0.964	292	0.848	337	0.425
23	0.240	68	0.257	113	0.715	158	1.000	203	0.899	248	0.967	293	0.839	338	0.414
24	0.244	69	0.267	114	0.724	159	0.999	204	0.898	249	0.971	294	0.830	339	0.403
25	0.247	70	0.278	115	0.733	160	0.998	205	0.897	250	0.974	295	0.821	340	0.392
26	0.250	71	0.289	116	0.742	161	0.997	206	0.897	251	0.977	296	0.812	341	0.381
27	0.253	72	0.300	117	0.751	162	0.996	207	0.896	252	0.980	297	0.803	342	0.370
28	0.255	73	0.311	118	0.760	163	0.994	208	0.896	253	0.983	298	0.794	343	0.358
29	0.256	74	0.322	119	0.769	164	0.992	209	0.896	254	0.985	299	0.784	344	0.347
30	0.257	75	0.334	120	0.778	165	0.990	210	0.895	255	0.988	300	0.775	345	0.335
31	0.256	76	0.346	121	0.788	166	0.987	211	0.897	256	0.990	301	0.766	346	0.324
32	0.255	77	0.357	122	0.797	167	0.985	212	0.898	257	0.992	302	0.757	347	0.313
33	0.253	78	0.369	123	0.807	168	0.982	213	0.900	258	0.993	303	0.748	348	0.302
34	0.251	79	0.381	124	0.816	169	0.979	214	0.901	259	0.994	304	0.739	349	0.291
35	0.248	80	0.393	125	0.826	170	0.976	215	0.902	260	0.995	305	0.730	350	0.280
36	0.245	81	0.404	126	0.835	171	0.973	216	0.904	261	0.996	306	0.720	351	0.270
37	0.241	82	0.415	127	0.845	172	0.970	217	0.905	262	0.996	307	0.711	352	0.260
38	0.236	83	0.427	128	0.854	173	0.967	218	0.906	263	0.996	308	0.702	353	0.250
39	0.232	84	0.438	129	0.863	174	0.964	219	0.907	264	0.996	309	0.693	354	0.241
40	0.227	85	0.449	130	0.873	175	0.960	220	0.908	265	0.995	310	0.684	355	0.232
41	0.222	86	0.460	131	0.882	176	0.957	221	0.910	266	0.993	311	0.675	356	0.224
42	0.217	87	0.470	132	0.890	177	0.954	222	0.911	267	0.992	312	0.666	357	0.216
43	0.212	88	0.481	133	0.899	178	0.951	223	0.912	268	0.990	313	0.657	358	0.209
44	0.207	89	0.491	134	0.907	179	0.947	224	0.913	269	0.988	314	0.648	359	0.203

Remarks:

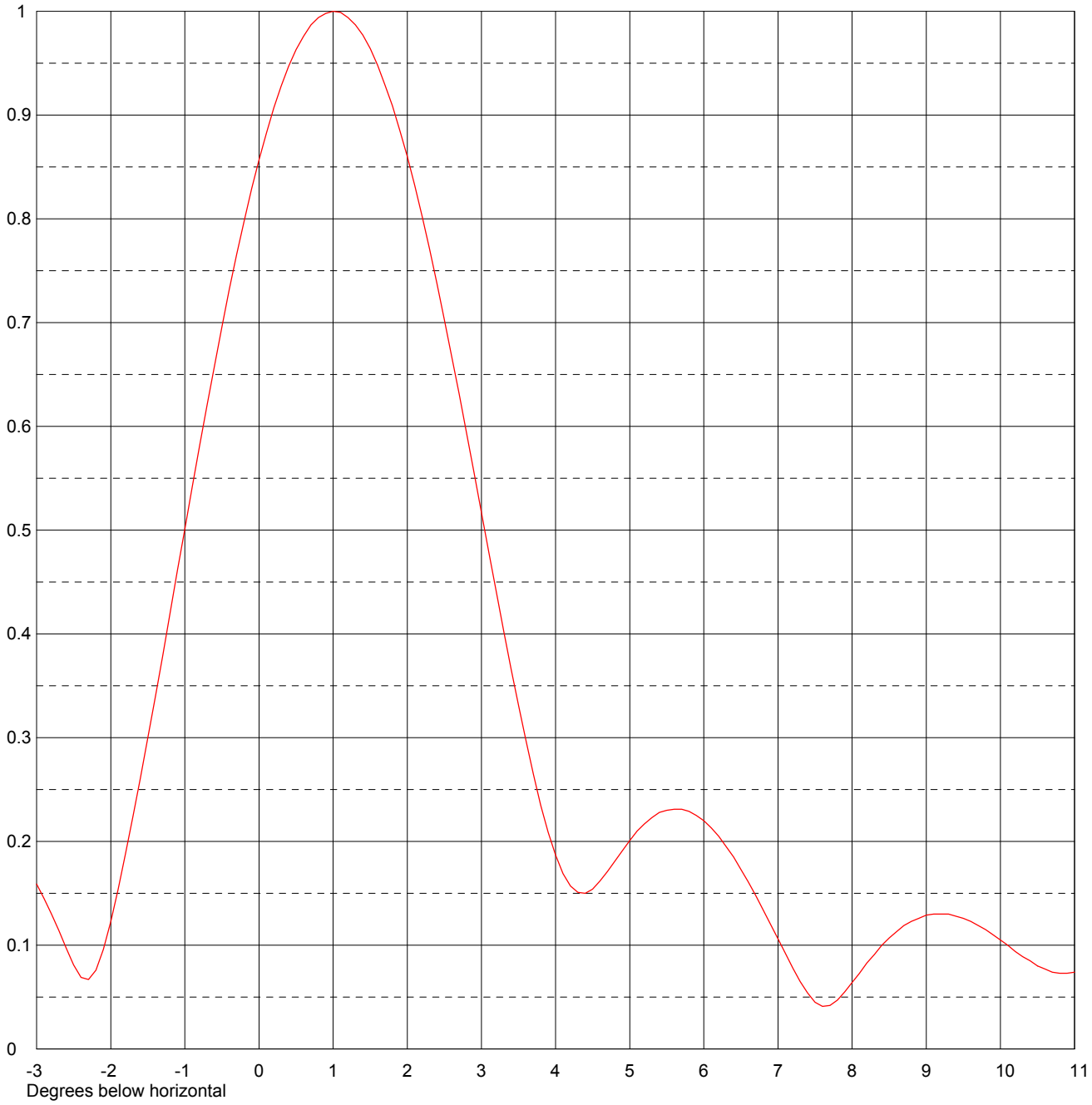
Exhibit No.
1c

Dielectric

Date	**28 Mar 2003**		
Call Letters	**WXXI-DT**	Channel	**16**
Location			
Customer			
Antenna Type	**TFU-16DSB-M**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**16.0 (12.04 dB)**	Beam Tilt	**1.00 Degrees**
RMS Gain at Horizontal	**11.8 (10.72 dB)**	Frequency	**485.00 MHz**
Calculated / Measured	**Calculated**	Drawing #	**16B160100**



Remarks:

Exhibit No.
1d

Dielectric

Date **28 Mar 2003**
Call Letters **WXXI-DT** Channel **16**
Location
Customer
Antenna Type **TFU-16DSB-M**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **16B160100**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.177	2.4	0.738	10.6	0.077	30.5	0.030	51.0	0.007	71.5	0.073
-9.5	0.110	2.6	0.667	10.8	0.073	31.0	0.027	51.5	0.005	72.0	0.066
-9.0	0.041	2.8	0.593	11.0	0.074	31.5	0.020	52.0	0.006	72.5	0.058
-8.5	0.077	3.0	0.517	11.5	0.090	32.0	0.008	52.5	0.007	73.0	0.051
-8.0	0.150	3.2	0.441	12.0	0.106	32.5	0.005	53.0	0.011	73.5	0.045
-7.5	0.203	3.4	0.366	12.5	0.111	33.0	0.017	53.5	0.016	74.0	0.039
-7.0	0.223	3.6	0.297	13.0	0.100	33.5	0.027	54.0	0.023	74.5	0.033
-6.5	0.204	3.8	0.235	13.5	0.077	34.0	0.032	54.5	0.030	75.0	0.028
-6.0	0.150	4.0	0.187	14.0	0.049	34.5	0.032	55.0	0.038	75.5	0.024
-5.5	0.071	4.2	0.157	14.5	0.035	35.0	0.029	55.5	0.046	76.0	0.020
-5.0	0.039	4.4	0.150	15.0	0.045	35.5	0.026	56.0	0.053	76.5	0.017
-4.5	0.118	4.6	0.162	15.5	0.059	36.0	0.029	56.5	0.059	77.0	0.014
-4.0	0.177	4.8	0.181	16.0	0.063	36.5	0.038	57.0	0.062	77.5	0.011
-3.5	0.194	5.0	0.201	16.5	0.056	37.0	0.048	57.5	0.063	78.0	0.009
-3.0	0.159	5.2	0.217	17.0	0.044	37.5	0.056	58.0	0.061	78.5	0.007
-2.8	0.130	5.4	0.228	17.5	0.039	38.0	0.059	58.5	0.057	79.0	0.006
-2.6	0.097	5.6	0.231	18.0	0.049	38.5	0.056	59.0	0.050	79.5	0.005
-2.4	0.069	5.8	0.229	18.5	0.061	39.0	0.046	59.5	0.040	80.0	0.004
-2.2	0.076	6.0	0.220	19.0	0.067	39.5	0.030	60.0	0.029	80.5	0.003
-2.0	0.123	6.2	0.205	19.5	0.061	40.0	0.010	60.5	0.018	81.0	0.003
-1.8	0.188	6.4	0.185	20.0	0.045	40.5	0.014	61.0	0.013	81.5	0.002
-1.6	0.261	6.6	0.161	20.5	0.020	41.0	0.037	61.5	0.023	82.0	0.002
-1.4	0.339	6.8	0.134	21.0	0.010	41.5	0.060	62.0	0.037	82.5	0.002
-1.2	0.420	7.0	0.106	21.5	0.038	42.0	0.079	62.5	0.052	83.0	0.002
-1.0	0.501	7.2	0.078	22.0	0.060	42.5	0.093	63.0	0.066	83.5	0.001
-0.8	0.582	7.4	0.054	22.5	0.072	43.0	0.101	63.5	0.080	84.0	0.001
-0.6	0.659	7.6	0.041	23.0	0.073	43.5	0.103	64.0	0.092	84.5	0.001
-0.4	0.732	7.8	0.047	23.5	0.062	44.0	0.100	64.5	0.102	85.0	0.001
-0.2	0.798	8.0	0.064	24.0	0.043	44.5	0.091	65.0	0.110	85.5	0.001
0.0	0.857	8.2	0.083	24.5	0.028	45.0	0.079	65.5	0.116	86.0	0.001
0.2	0.907	8.4	0.100	25.0	0.039	45.5	0.066	66.0	0.121	86.5	0.000
0.4	0.947	8.6	0.113	25.5	0.063	46.0	0.051	66.5	0.123	87.0	0.000
0.6	0.976	8.8	0.123	26.0	0.083	46.5	0.038	67.0	0.123	87.5	0.000
0.8	0.994	9.0	0.129	26.5	0.096	47.0	0.028	67.5	0.122	88.0	0.000
1.0	1.000	9.2	0.130	27.0	0.099	47.5	0.022	68.0	0.119	88.5	0.000
1.2	0.994	9.4	0.128	27.5	0.092	48.0	0.020	68.5	0.114	89.0	0.000
1.4	0.977	9.6	0.123	28.0	0.078	48.5	0.019	69.0	0.109	89.5	0.000
1.6	0.948	9.8	0.115	28.5	0.061	49.0	0.018	69.5	0.103	90.0	0.000
1.8	0.909	10.0	0.105	29.0	0.044	49.5	0.016	70.0	0.096		
2.0	0.860	10.2	0.094	29.5	0.033	50.0	0.013	70.5	0.088		
2.2	0.802	10.4	0.085	30.0	0.031	50.5	0.010	71.0	0.081		

Remarks: