



ENGINEERING STATEMENT
OF
JOHN F.X. BROWNE, P.E.
IN SUPPORT OF AN APPLICATION FOR
MODIFICATION OF CONSTRUCTION PERMIT
WCFE-DT
PLATTSBURGH, NY

Background

Mountain Lake Public Telecommunications Council (MLPTC) is the licensee of television station WCFE-TV, Ch 57, (BLET-19881102KE, Facility ID 119932) at Plattsburgh, NY and also holds a Construction Permit for WCFE-DT, CH 38, (BMPEDT-20040420AAM) at Plattsburgh. On April 18, 2007 the tower that held the WCFE-TV and WCFE-DT antenna collapsed due to heavy ice and snow. MLPTC has built another tower at the exact location of the original tower and at the same height, and now is applying for a modification of the construction permit to allow the use of an antenna with a slightly different pattern than the one authorized in the construction permit.

Site and Tower

The tower is registered (ASRN 1003308). Since the new tower has been constructed at the exact location (and is the same overall height) as the original tower, no notice to the FAA nor change in the ASR is necessary.



Antenna and Power

The proposed antenna is an ERI ETU-P3L5-38/57 directional wide-band panel radiator having a slightly different pattern than the authorized Dielectric TFU-C4SP-5/16H-1-T; it will also be used for WCFE-TV (CH 57). The radiation center of the antenna will be at the same height as authorized in the construction permit. The ERP has been reduced from 100 kW to 55 kW to comply with the Commission's "freeze" on expansion of coverage. Figure 1 shows the coverage of the proposed ERI antenna contrasted with the Dielectric antenna at the presently authorized ERP of 100 kW and Figure 2 depicts the coverage with the ERP of the proposed ERI antenna reduced to 55 kW. The azimuth and elevation patterns for the proposed antenna as well as a relative field/dBk table comparing both antennas are attached as Exhibit 1-Exhibit 4 and Table 1.

Interference

There would be no new domestic or Canadian interference considerations, as the coverage in any direction does not exceed that already authorized.

Environmental/RFR

This construction does not involve any of the conditions that would require preparation an Environmental Assessment as specified in 47 CFR Section 1.1311, therefore, further consideration is not required.

The additional ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.001167 mW/cm^2 , which is less than 5% of the MPE for public exposure (0.411333 mW/cm^2) at the proposed frequency.



MPLTC agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be instructed in the RFR scenario and specific issues regarding avoidance and mitigation; further workers will also be encouraged to wear personal RFR monitors when on the structure. A locked security fence encloses the tower base and appropriate signage warning of RFR hazards is in place.

Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.



John F.X. Browne, P.E.

January 4, 2008

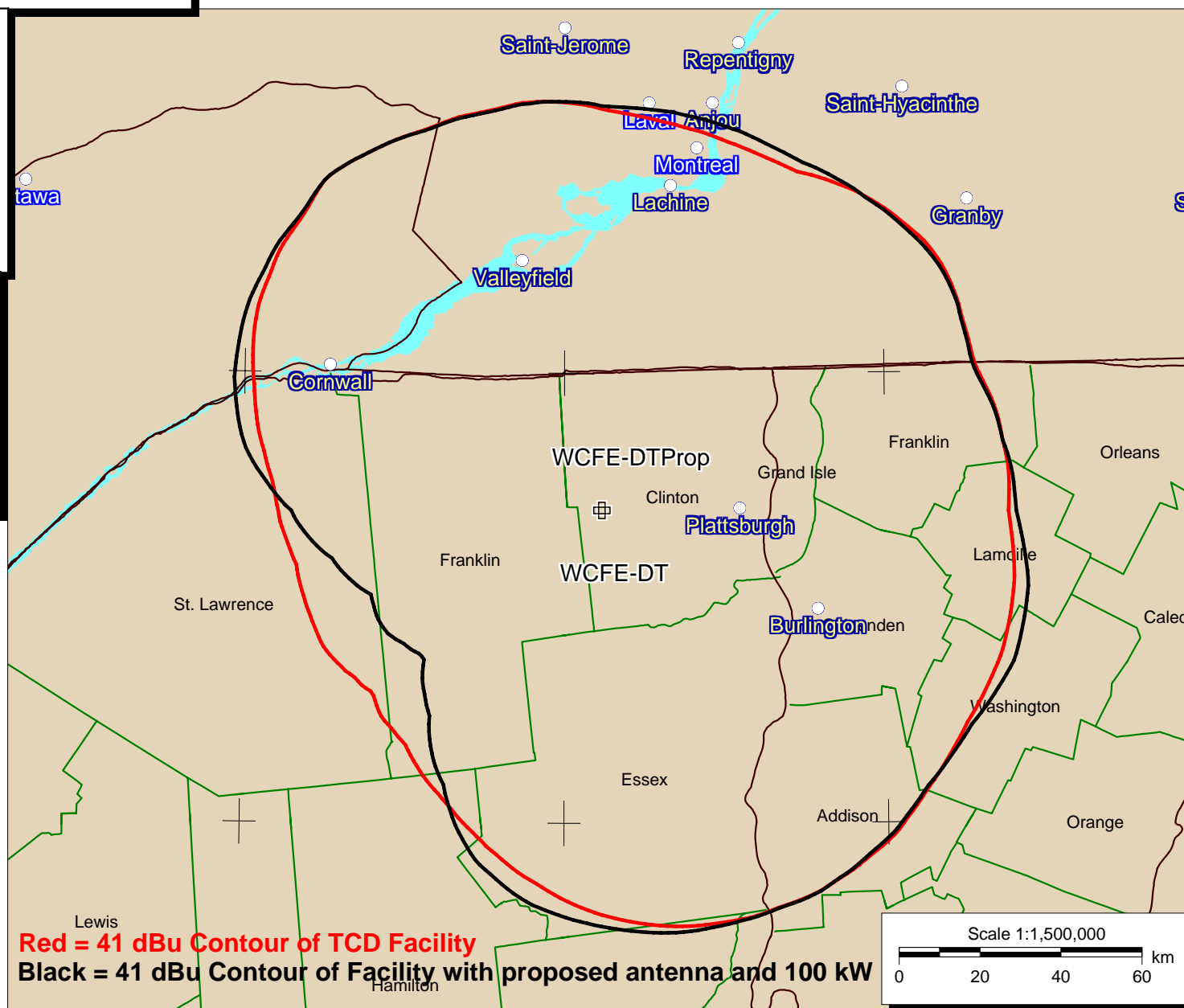
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WCFE-DT

BMPEDT20040420AAM
Latitude: 44-41-43 N
Longitude: 073-53-00 W
ERP: 100.00 kW
Channel: 38
Frequency: 617.0 MHz
AMSL Height: 1238.0 m
Horiz. Pattern: Directional

WCFE-DTProp

Latitude: 44-41-43 N
Longitude: 073-53-00 W
ERP: 100.00 kW
Channel: 38
Frequency: 617.0 MHz
AMSL Height: 1238.0 m
Horiz. Pattern: Directional



Date:12-20-2007

Fig. 1

WCFE-DT

BMPEDT20040420AAM
Latitude: 44-41-43 N
Longitude: 073-53-00 W
ERP: 100.00 kW
Channel: 38
Frequency: 617.0 MHz
AMSL Height: 1238.0 m
Horiz. Pattern: Directional

WCFE-DTProp

Latitude: 44-41-43 N
Longitude: 073-53-00 W
ERP: 55.00 kW
Channel: 38
Frequency: 617.0 MHz
AMSL Height: 1238.0 m
Horiz. Pattern: Directional

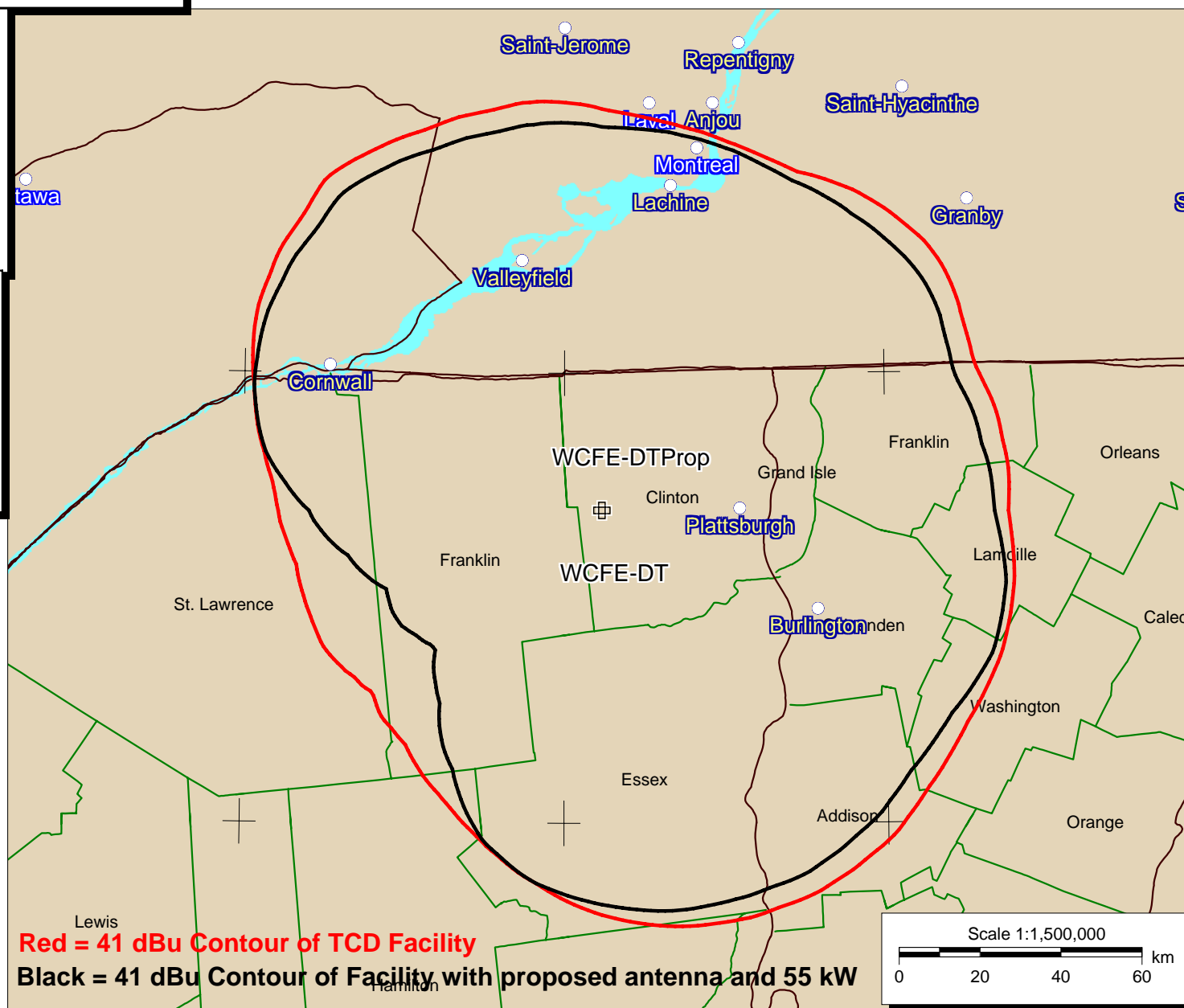
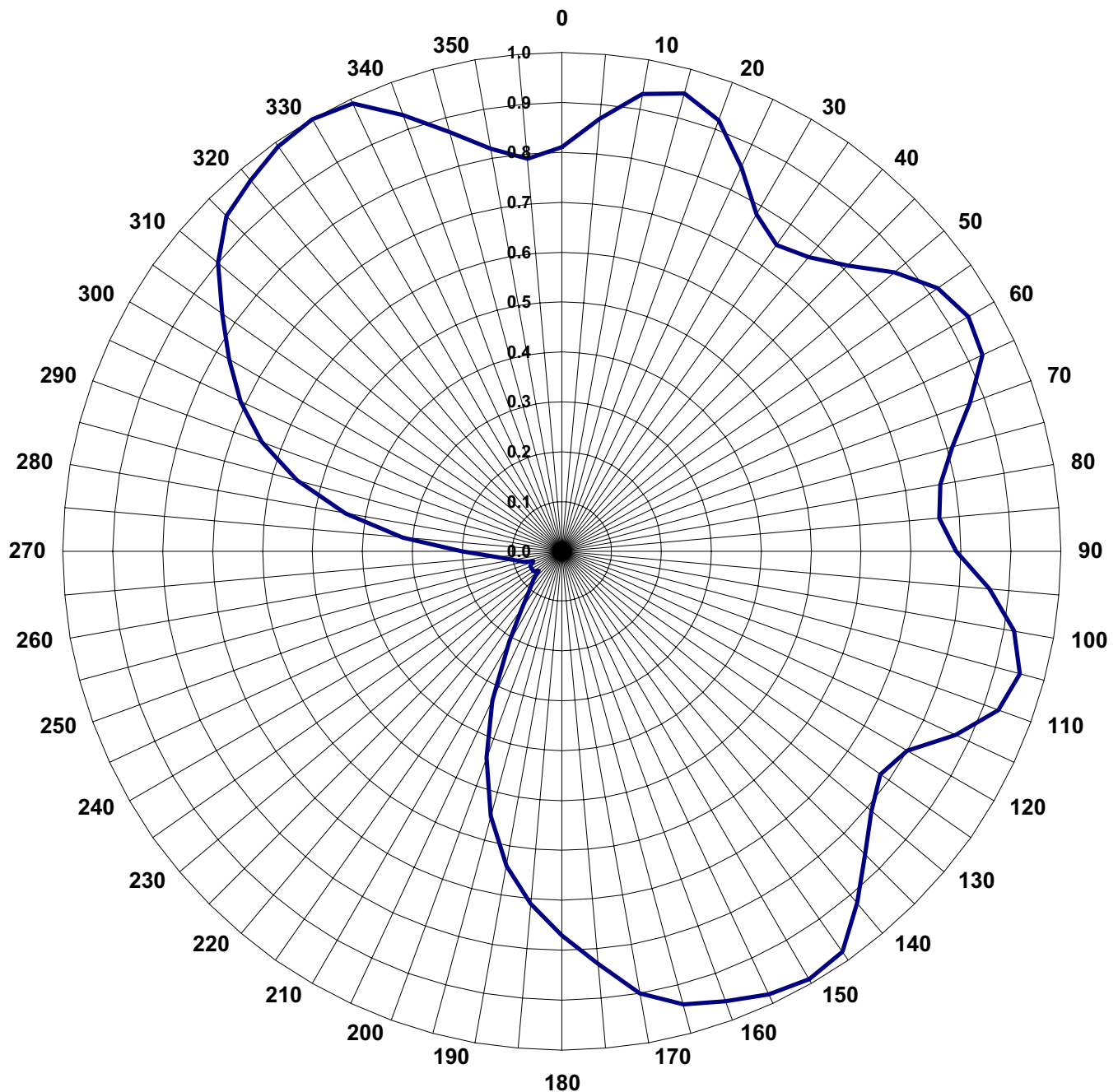


Fig. 2

Exhibit 1

AZIMUTH PATTERN**TYPE:****CH38HAZ-W****Frequency:****38 (Digital)****Numeric****dB****Location:****Plattsburgh, NY****Directivity:****1.75****2.43****Polarization:****Horizontal****Peak(s) at:**

Note: Pattern shape and directivity may vary with
channel and mounting configuration.



TABULATED DATA FOR AZIMUTH PATTERN

Exhibit 2

TYPE: CH57HAZ-W

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.810	-1.830	92	0.820	-1.724	184	0.720	-2.853	276	0.340	-9.370
2	0.830	-1.618	94	0.850	-1.412	186	0.700	-3.098	278	0.390	-8.179
4	0.850	-1.412	96	0.880	-1.110	188	0.660	-3.609	280	0.440	-7.131
6	0.890	-1.012	98	0.890	-1.012	190	0.640	-3.876	282	0.480	-6.375
8	0.900	-0.915	100	0.920	-0.724	192	0.600	-4.437	284	0.520	-5.680
10	0.930	-0.630	102	0.930	-0.630	194	0.560	-5.036	286	0.560	-5.036
12	0.930	-0.630	104	0.940	-0.537	196	0.530	-5.514	288	0.590	-4.583
14	0.940	-0.537	106	0.940	-0.537	198	0.490	-6.196	290	0.640	-3.876
16	0.930	-0.630	108	0.930	-0.630	200	0.440	-7.131	292	0.660	-3.609
18	0.930	-0.630	110	0.930	-0.630	202	0.390	-8.179	294	0.700	-3.098
20	0.920	-0.724	112	0.900	-0.915	204	0.350	-9.119	296	0.720	-2.853
22	0.890	-1.012	114	0.880	-1.110	206	0.290	-10.752	298	0.750	-2.499
24	0.870	-1.210	116	0.850	-1.412	208	0.250	-12.041	300	0.770	-2.270
26	0.840	-1.514	118	0.830	-1.618	210	0.210	-13.556	302	0.800	-1.938
28	0.810	-1.830	120	0.800	-1.938	212	0.170	-15.391	304	0.830	-1.618
30	0.780	-2.158	122	0.790	-2.047	214	0.150	-16.478	306	0.850	-1.412
32	0.770	-2.270	124	0.790	-2.047	216	0.120	-18.416	308	0.880	-1.110
34	0.760	-2.384	126	0.790	-2.047	218	0.100	-20.000	310	0.900	-0.915
36	0.750	-2.499	128	0.800	-1.938	220	0.100	-20.000	312	0.910	-0.819
38	0.760	-2.384	130	0.810	-1.830	222	0.080	-21.938	314	0.940	-0.537
40	0.770	-2.270	132	0.820	-1.724	224	0.080	-21.938	316	0.950	-0.446
42	0.780	-2.158	134	0.850	-1.412	226	0.070	-23.098	318	0.970	-0.265
44	0.800	-1.938	136	0.880	-1.110	228	0.080	-21.938	320	0.970	-0.265
46	0.820	-1.724	138	0.900	-0.915	230	0.060	-24.437	322	0.990	-0.087
48	0.850	-1.412	140	0.920	-0.724	232	0.070	-23.098	324	0.990	-0.087
50	0.870	-1.210	142	0.950	-0.446	234	0.070	-23.098	326	0.990	-0.087
52	0.900	-0.915	144	0.970	-0.265	236	0.070	-23.098	328	1.000	0.000
54	0.920	-0.724	146	0.980	-0.175	238	0.070	-23.098	330	1.000	0.000
56	0.930	-0.630	148	0.990	-0.087	240	0.070	-23.098	332	0.990	-0.087
58	0.940	-0.537	150	0.990	-0.087	242	0.070	-23.098	334	0.980	-0.175
60	0.940	-0.537	152	0.990	-0.087	244	0.070	-23.098	336	0.980	-0.175
62	0.940	-0.537	154	0.990	-0.087	246	0.070	-23.098	338	0.960	-0.355
64	0.930	-0.630	156	0.990	-0.087	248	0.070	-23.098	340	0.930	-0.630
66	0.920	-0.724	158	0.980	-0.175	250	0.060	-24.437	342	0.910	-0.819
68	0.900	-0.915	160	0.960	-0.355	252	0.080	-21.938	344	0.880	-1.110
70	0.870	-1.210	162	0.970	-0.265	254	0.070	-23.098	346	0.850	-1.412
72	0.850	-1.412	164	0.950	-0.446	256	0.080	-21.938	348	0.830	-1.618
74	0.830	-1.618	166	0.930	-0.630	258	0.080	-21.938	350	0.820	-1.724
76	0.800	-1.938	168	0.910	-0.819	260	0.100	-20.000	352	0.800	-1.938
78	0.780	-2.158	170	0.900	-0.915	262	0.100	-20.000	354	0.790	-2.047
80	0.770	-2.270	172	0.880	-1.110	264	0.120	-18.416	356	0.800	-1.938
82	0.760	-2.384	174	0.850	-1.412	266	0.150	-16.478	358	0.800	-1.938
84	0.760	-2.384	176	0.830	-1.618	268	0.170	-15.391	360	0.810	-1.830
86	0.770	-2.270	178	0.800	-1.938	270	0.200	-13.979			
88	0.780	-2.158	180	0.770	-2.270	272	0.250	-12.041			
90	0.790	-2.047	182	0.750	-2.499	274	0.290	-10.752			

Exhibit 3

ELEVATION PATTERN

TYPE:	ETU-P3L5-28		Frequency:	38 (Digital)
Directivity:	Numeric	dBd	Location:	Plattsburgh, NY
Main Lobe:	22.03	13.43	Beam Tilt:	1.20
Horizontal:	17.45	12.42	Polarization:	Horizontal

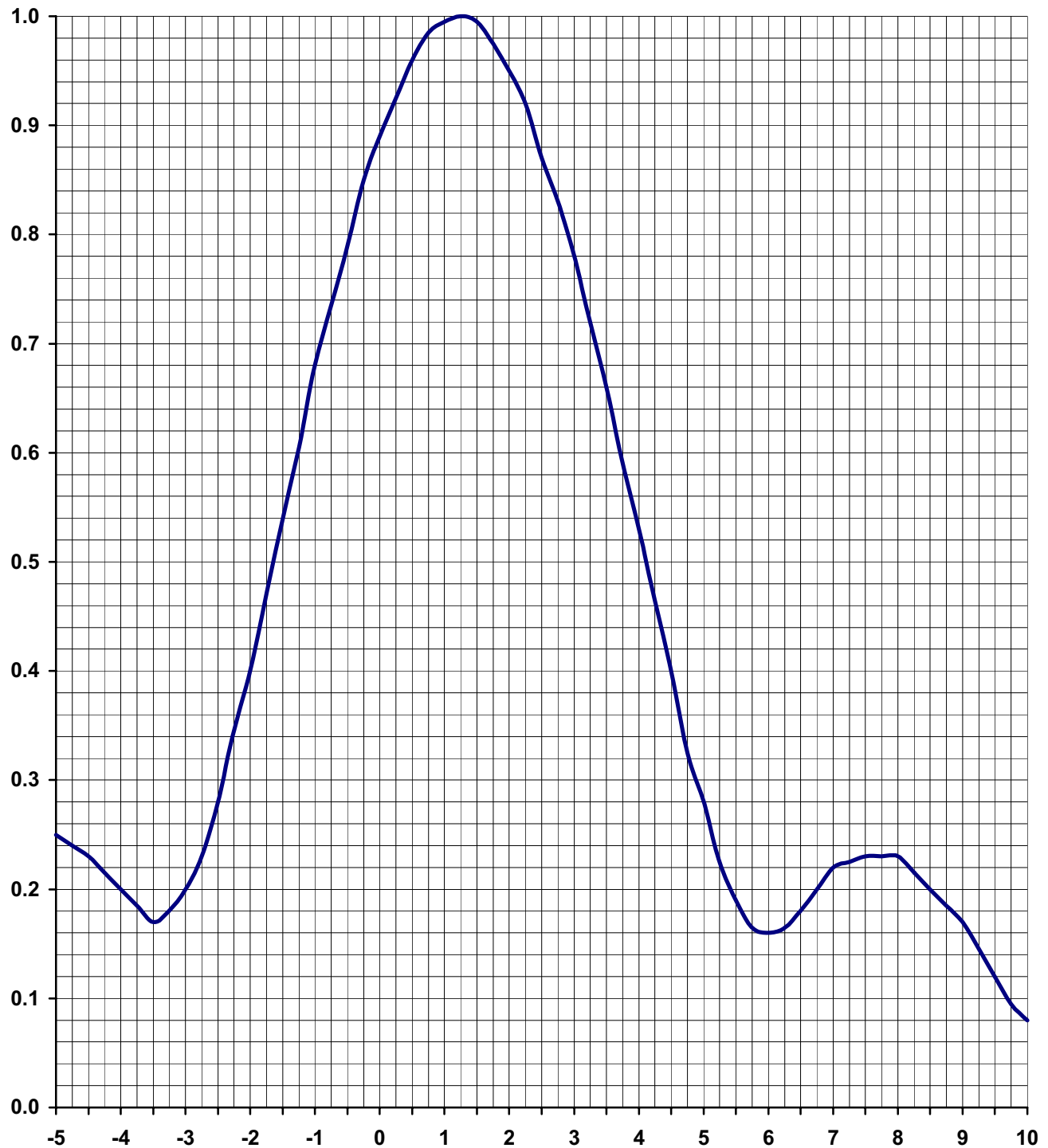


Exhibit 4

TABULATED DATA FOR ELEVATION PATTERN**ETU-P3L5-28****-5 to 10 degrees in 0.25 increments****10 to 90 degrees in 0.50 increments**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
-5.00	0.250	-12.04	6.75	0.200	-13.98	27.00	0.140	-17.08	50.50	0.070	-23.10	74.00	0.030	-30.46
-4.75	0.240	-12.40	7.00	0.220	-13.15	27.50	0.130	-17.72	51.00	0.080	-21.94	74.50	0.030	-30.46
-4.50	0.230	-12.77	7.25	0.225	-12.96	28.00	0.110	-19.17	51.50	0.100	-20.00	75.00	0.030	-30.46
-4.25	0.215	-13.35	7.50	0.230	-12.77	28.50	0.100	-20.00	52.00	0.110	-19.17	75.50	0.020	-33.98
-4.00	0.200	-13.98	7.75	0.230	-12.77	29.00	0.080	-21.94	52.50	0.120	-18.42	76.00	0.020	-33.98
-3.75	0.185	-14.66	8.00	0.230	-12.77	29.50	0.060	-24.44	53.00	0.140	-17.08	76.50	0.020	-33.98
-3.50	0.170	-15.39	8.25	0.215	-13.35	30.00	0.050	-26.02	53.50	0.140	-17.08	77.00	0.020	-33.98
-3.25	0.180	-14.89	8.50	0.200	-13.98	30.50	0.040	-27.96	54.00	0.150	-16.48	77.50	0.020	-33.98
-3.00	0.200	-13.98	8.75	0.185	-14.66	31.00	0.040	-27.96	54.50	0.160	-15.92	78.00	0.020	-33.98
-2.75	0.230	-12.77	9.00	0.170	-15.39	31.50	0.050	-26.02	55.00	0.160	-15.92	78.50	0.020	-33.98
-2.50	0.280	-11.06	9.25	0.145	-16.77	32.00	0.060	-24.44	55.50	0.160	-15.92	79.00	0.020	-33.98
-2.25	0.345	-9.24	9.50	0.120	-18.42	32.50	0.070	-23.10	56.00	0.160	-15.92	79.50	0.010	-40.00
-2.00	0.400	-7.96	9.75	0.095	-20.45	33.00	0.070	-23.10	56.50	0.160	-15.92	80.00	0.010	-40.00
-1.75	0.470	-6.56	10.00	0.080	-21.94	33.50	0.070	-23.10	57.00	0.150	-16.48	80.50	0.010	-40.00
-1.50	0.540	-5.35	10.50	0.080	-21.94	34.00	0.060	-24.44	57.50	0.140	-17.08	81.00	0.010	-40.00
-1.25	0.605	-4.36	11.00	0.110	-19.17	34.50	0.050	-26.02	58.00	0.140	-17.08	81.50	0.010	-40.00
-1.00	0.680	-3.35	11.50	0.150	-16.48	35.00	0.040	-27.96	58.50	0.130	-17.72	82.00	0.010	-40.00
-0.75	0.735	-2.67	12.00	0.180	-14.89	35.50	0.030	-30.46	59.00	0.120	-18.42	82.50	0.010	-40.00
-0.50	0.790	-2.05	12.50	0.190	-14.42	36.00	0.030	-30.46	59.50	0.110	-19.17	83.00	0.010	-40.00
-0.25	0.850	-1.41	13.00	0.200	-13.98	36.50	0.040	-27.96	60.00	0.100	-20.00	83.50	0.010	-40.00
0.00	0.890	-1.01	13.50	0.180	-14.89	37.00	0.060	-24.44	60.50	0.100	-20.00	84.00	0.010	-40.00
0.25	0.925	-0.68	14.00	0.160	-15.92	37.50	0.070	-23.10	61.00	0.090	-20.92	84.50	0.010	-40.00
0.50	0.960	-0.35	14.50	0.130	-17.72	38.00	0.080	-21.94	61.50	0.070	-23.10	85.00	0.010	-40.00
0.75	0.985	-0.13	15.00	0.090	-20.92	38.50	0.090	-20.92	62.00	0.070	-23.10	85.50	0.010	-40.00
1.00	0.995	-0.04	15.50	0.060	-24.44	39.00	0.100	-20.00	62.50	0.060	-24.44	86.00	0.010	-40.00
1.25	1.000	0.00	16.00	0.040	-27.96	39.50	0.100	-20.00	63.00	0.050	-26.02	86.50	0.010	-40.00
1.50	0.995	-0.04	16.50	0.060	-24.44	40.00	0.090	-20.92	63.50	0.040	-27.96	87.00	0.020	-33.98
1.75	0.975	-0.22	17.00	0.080	-21.94	40.50	0.080	-21.94	64.00	0.040	-27.96	87.50	0.020	-33.98
2.00	0.950	-0.45	17.50	0.090	-20.92	41.00	0.070	-23.10	64.50	0.030	-30.46	88.00	0.010	-40.00
2.25	0.920	-0.72	18.00	0.100	-20.00	41.50	0.060	-24.44	65.00	0.030	-30.46	88.50	0.010	-40.00
2.50	0.870	-1.21	18.50	0.100	-20.00	42.00	0.040	-27.96	65.50	0.020	-33.98	89.00	0.010	-40.00
2.75	0.830	-1.62	19.00	0.090	-20.92	42.50	0.030	-30.46	66.00	0.020	-33.98	89.50	0.010	-40.00
3.00	0.780	-2.16	19.50	0.070	-23.10	43.00	0.030	-30.46	66.50	0.020	-33.98	90.00	0.018	-35.04
3.25	0.720	-2.85	20.00	0.050	-26.02	43.50	0.030	-30.46	67.00	0.020	-33.98			
3.50	0.660	-3.61	20.50	0.050	-26.02	44.00	0.040	-27.96	67.50	0.020	-33.98			
3.75	0.590	-4.58	21.00	0.060	-24.44	44.50	0.050	-26.02	68.00	0.020	-33.98			
4.00	0.530	-5.51	21.50	0.080	-21.94	45.00	0.060	-24.44	68.50	0.030	-30.46			
4.25	0.465	-6.65	22.00	0.100	-20.00	45.50	0.070	-23.10	69.00	0.030	-30.46			
4.50	0.400	-7.96	22.50	0.120	-18.42	46.00	0.070	-23.10	69.50	0.030	-30.46			
4.75	0.325	-9.76	23.00	0.130	-17.72	46.50	0.070	-23.10	70.00	0.030	-30.46			
5.00	0.280	-11.06	23.50	0.140	-17.08	47.00	0.060	-24.44	70.50	0.030	-30.46			
5.25	0.225	-12.96	24.00	0.140	-17.08	47.50	0.060	-24.44	71.00	0.030	-30.46			
5.50	0.190	-14.42	24.50	0.140	-17.08	48.00	0.050	-26.02	71.50	0.030	-30.46			
5.75	0.165	-15.65	25.00	0.150	-16.48	48.50	0.040	-27.96	72.00	0.030	-30.46			
6.00	0.160	-15.92	25.50	0.150	-16.48	49.00	0.040	-27.96	72.50	0.030	-30.46			
6.25	0.165	-15.65	26.00	0.140	-17.08	49.50	0.040	-27.96	73.00	0.030	-30.46			
6.50	0.180	-14.89	26.50	0.140	-17.08	50.00	0.050	-26.02	73.50	0.030	-30.46			

WCFE-DT DIRECTIONAL ANTENNA DATA
Comparison Dielectric TFU-C4SP-5/16H-1-T vs ERI ETU-P3L5-38/57
TABLE #1

Dielectric TFU-C4SP-5/16H-1-T with 100 kW					ERI ETU-P3L5-38/57 with 55 kW				
Actual Bearing	Pattern Azimuth	Relative Field	ERP (dBk)	CONTOURS(km)		Relative Field	ERP (dBk)	CONTOURS(km)	
				41 dBu	48 dBu			41dBu	48 dBu
N000E	0.00	0.776	17.80	99.1	85.4	0.810	15.57	94.7	81.2
	10.00	0.786	17.91			0.930	16.77		
	20.00	0.748	17.48			0.920	16.68		
	30.00	0.669	16.51			0.780	15.25		
	40.00	0.778	17.82			0.770	15.13		
N045E	45.00	0.858	18.67	102.7	88.5	0.800	15.47	97.8	82.8
	50.00	0.918	19.26			0.870	16.19		
	60.00	0.954	19.59			0.940	16.87		
	70.00	0.900	19.08			0.870	16.19		
	80.00	0.770	17.73			0.770	15.13		
N090E	90.00	0.710	17.03	100.5	86.1	0.790	15.36	97.0	82.9
	100.00	0.760	17.62			0.920	16.68		
	110.00	0.772	17.75			0.930	16.77		
	120.00	0.751	17.51			0.800	15.47		
	130.00	0.825	18.33			0.810	15.57		
N135E	135.00	0.887	18.96	107.6	92.0	0.850	15.99	101.0	86.3
	140.00	0.948	19.54			0.920	16.68		
	150.00	0.985	19.87			0.990	17.32		
	160.00	0.949	19.55			0.960	17.05		
	170.00	0.826	18.34			0.900	16.49		
N180E	180.00	0.658	16.36	100.0	85.5	0.770	15.13	97.4	83.1
	190.00	0.475	13.53			0.640	13.53		
	200.00	0.335	10.50			0.440	10.27		
	210.00	0.247	7.85			0.210	3.85		
	220.00	0.195	5.80			0.100	-2.60		
N225E	225.00	0.199	5.98	74.7	63.8	0.080	-4.53	58.4	48.2
	230.00	0.206	6.28			0.060	-7.03		
	240.00	0.202	6.11			0.070	-5.69		
	250.00	0.189	5.53			0.060	-7.03		
	260.00	0.188	5.48			0.100	-2.60		
N270E	270.00	0.247	7.85	80.0	68.3	0.200	3.42	72.4	61.5
	280.00	0.335	10.50			0.440	10.27		
	290.00	0.475	13.53			0.640	13.53		
	300.00	0.659	16.38			0.770	15.13		
	310.00	0.845	18.54			0.900	16.49		
N315E	315.00	0.923	19.30	103.9	89.6	0.940	16.87	99.1	85.0
	320.00	0.968	19.72			0.970	17.14		
	330.00	1.000	20.00			1.000	17.40		
	340.00	0.946	19.52			0.930	16.77		
	350.00	0.834	18.42			0.820	15.68		

Maximum: N330E 20.00 dBk Maximum: N330E 17.40 dBk

Minimum: N255E 5.06 dBk Minima: N230E -7.03 dBk
N250E -7.03 dBk