

TECHNICAL EXHIBIT
CONCERNING HUMAN EXPOSURE TO RF ELECTROMAGNETIC ENERGY
PREPARED FOR
STATION WWMB(DT)
FLORENCE, SOUTH CAROLINA
CH 21 290 KW (MAX-DA) 581 M

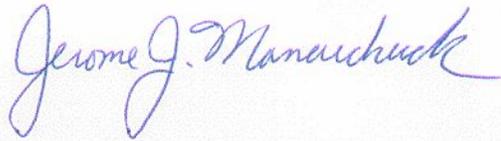
Technical Statement

The proposed facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 579 meters above ground level. The maximum DTV ERP is 290 kW (horizontal polarization). A “worst-case” vertical plane relative field value of 0.1 (for angles below 60 degrees downward) was presumed for the antenna's downward radiation (see Figure 1). The calculated power density at a point 2 meters above ground level is 0.0003 mW/cm². This is 0.09% of the FCC's recommended limit of 0.34 mW/cm² for channel 21 for an “uncontrolled” environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with RFR warning signs. As this will be a multi-user site an agreement between the stations will control access. Furthermore, in the event that workers or other authorized personnel enter the restricted area or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing “accepted” RFR protective clothing and/or RFR exposure.

Finally, it is noted that this technical exhibit only addresses the potential for radio frequency electromagnetic field exposure. All other aspects of the

environmental processing analysis will be or already has been provided to the FCC by the tower owner as part of the tower registration process.



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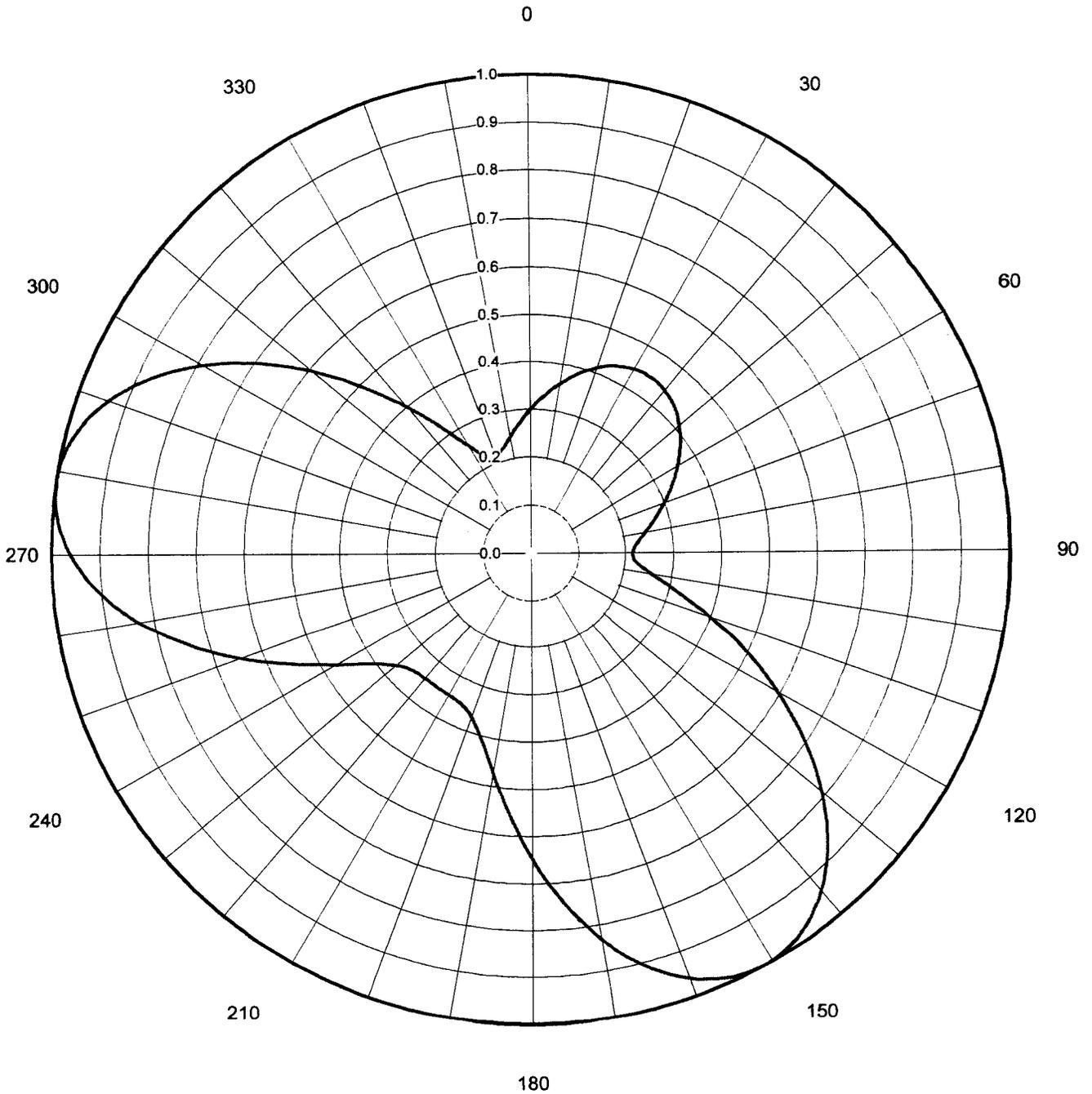


Proposal Number **DCA-9408**
Date **29-May-01**
Call Letters **WWMB** Channel **21**
Location **Florence, SC**
Customer
Antenna Type **TFU-30DSC-R 3BP290 DC**

AZIMUTH PATTERN

Gain **2.90** (**4.62 dB**)
Calculated / Measured **Calculated**

Frequency **515.00 MHz**
Drawing # **TFU-BP290-21**





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TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TFU-BP290-21**

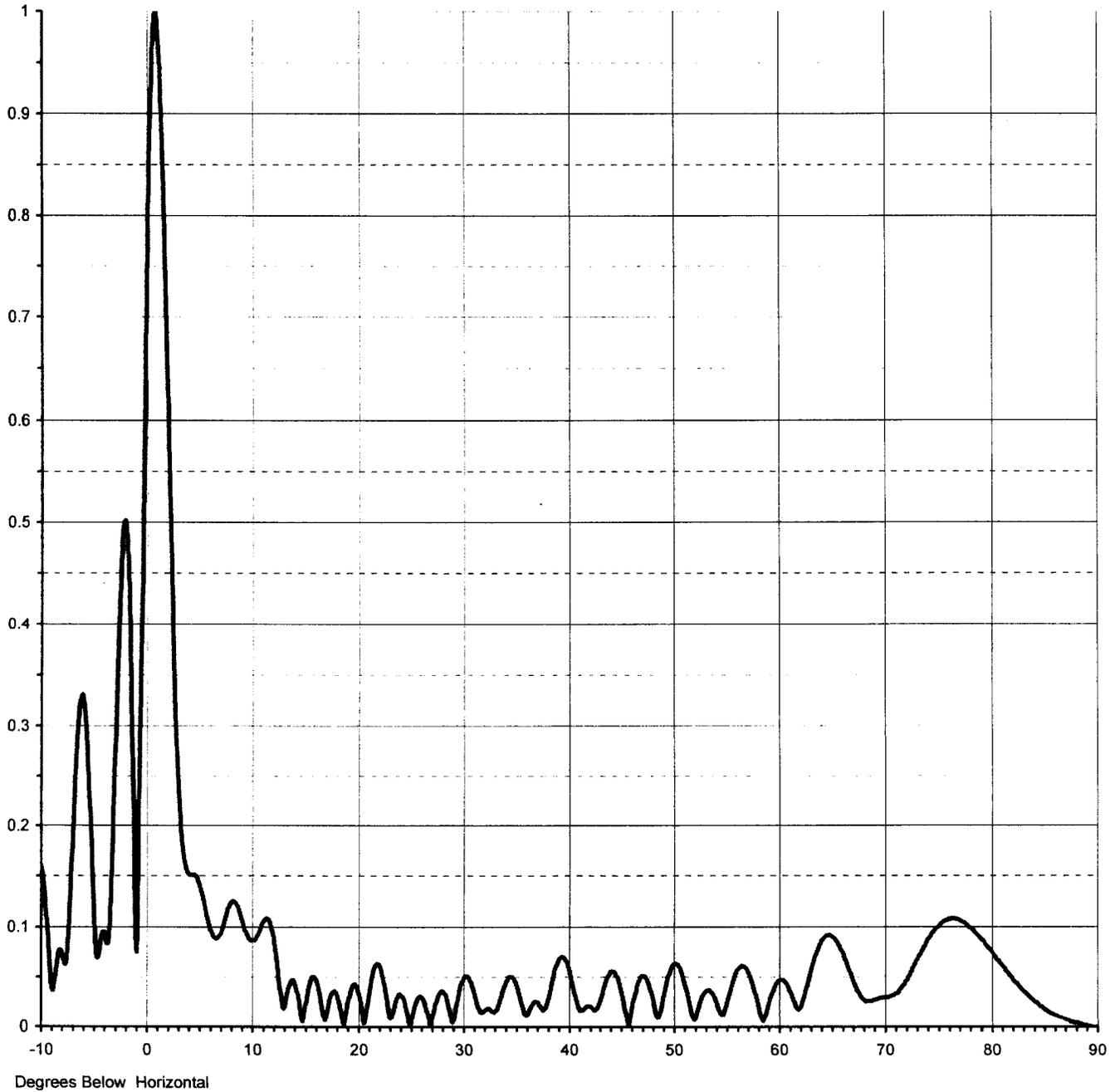
Angle	Field														
0	0.299	45	0.429	90	0.215	135	0.871	180	0.647	225	0.351	270	0.960	315	0.493
1	0.305	46	0.426	91	0.215	136	0.886	181	0.628	226	0.354	271	0.969	316	0.474
2	0.311	47	0.423	92	0.216	137	0.900	182	0.609	227	0.356	272	0.976	317	0.454
3	0.317	48	0.419	93	0.217	138	0.913	183	0.590	228	0.360	273	0.983	318	0.436
4	0.323	49	0.415	94	0.221	139	0.925	184	0.572	229	0.364	274	0.988	319	0.417
5	0.329	50	0.410	95	0.224	140	0.936	185	0.554	230	0.369	275	0.993	320	0.399
6	0.335	51	0.406	96	0.229	141	0.947	186	0.536	231	0.375	276	0.996	321	0.382
7	0.341	52	0.401	97	0.234	142	0.956	187	0.519	232	0.382	277	0.998	322	0.365
8	0.346	53	0.396	98	0.242	143	0.965	188	0.503	233	0.390	278	0.999	323	0.349
9	0.352	54	0.391	99	0.249	144	0.973	189	0.486	234	0.399	279	1.000	324	0.334
10	0.358	55	0.386	100	0.259	145	0.980	190	0.472	235	0.408	280	0.999	325	0.319
11	0.364	56	0.381	101	0.268	146	0.985	191	0.457	236	0.419	281	0.997	326	0.305
12	0.369	57	0.375	102	0.280	147	0.991	192	0.444	237	0.431	282	0.994	327	0.292
13	0.375	58	0.370	103	0.292	148	0.994	193	0.431	238	0.444	283	0.991	328	0.280
14	0.381	59	0.364	104	0.305	149	0.997	194	0.419	239	0.457	284	0.985	329	0.268
15	0.386	60	0.358	105	0.319	150	0.999	195	0.408	240	0.472	285	0.980	330	0.259
16	0.391	61	0.352	106	0.334	151	1.000	196	0.399	241	0.486	286	0.973	331	0.249
17	0.396	62	0.346	107	0.349	152	0.999	197	0.390	242	0.503	287	0.965	332	0.242
18	0.401	63	0.341	108	0.365	153	0.998	198	0.382	243	0.519	288	0.956	333	0.234
19	0.406	64	0.335	109	0.382	154	0.996	199	0.375	244	0.536	289	0.947	334	0.229
20	0.410	65	0.329	110	0.399	155	0.993	200	0.369	245	0.554	290	0.936	335	0.224
21	0.415	66	0.323	111	0.417	156	0.988	201	0.364	246	0.572	291	0.925	336	0.221
22	0.419	67	0.317	112	0.436	157	0.983	202	0.360	247	0.590	292	0.912	337	0.217
23	0.423	68	0.311	113	0.454	158	0.976	203	0.356	248	0.609	293	0.900	338	0.216
24	0.426	69	0.305	114	0.474	159	0.969	204	0.354	249	0.628	294	0.886	339	0.215
25	0.429	70	0.299	115	0.493	160	0.960	205	0.351	250	0.647	295	0.871	340	0.215
26	0.432	71	0.294	116	0.513	161	0.951	206	0.350	251	0.666	296	0.856	341	0.216
27	0.435	72	0.288	117	0.533	162	0.941	207	0.348	252	0.686	297	0.840	342	0.218
28	0.438	73	0.282	118	0.553	163	0.930	208	0.347	253	0.705	298	0.824	343	0.219
29	0.440	74	0.277	119	0.573	164	0.918	209	0.346	254	0.724	299	0.807	344	0.222
30	0.441	75	0.271	120	0.594	165	0.905	210	0.346	255	0.742	300	0.789	345	0.225
31	0.443	76	0.266	121	0.614	166	0.892	211	0.346	256	0.761	301	0.771	346	0.229
32	0.444	77	0.261	122	0.634	167	0.878	212	0.346	257	0.779	302	0.752	347	0.232
33	0.445	78	0.255	123	0.655	168	0.862	213	0.346	258	0.796	303	0.733	348	0.237
34	0.445	79	0.250	124	0.675	169	0.847	214	0.345	259	0.814	304	0.714	349	0.241
35	0.446	80	0.246	125	0.695	170	0.831	215	0.345	260	0.831	305	0.695	350	0.246
36	0.445	81	0.241	126	0.714	171	0.814	216	0.345	261	0.847	306	0.675	351	0.250
37	0.445	82	0.237	127	0.733	172	0.796	217	0.346	262	0.862	307	0.655	352	0.255
38	0.444	83	0.232	128	0.752	173	0.779	218	0.346	263	0.878	308	0.634	353	0.261
39	0.443	84	0.229	129	0.771	174	0.761	219	0.346	264	0.892	309	0.614	354	0.266
40	0.441	85	0.225	130	0.789	175	0.742	220	0.346	265	0.905	310	0.594	355	0.271
41	0.440	86	0.222	131	0.807	176	0.723	221	0.346	266	0.918	311	0.573	356	0.277
42	0.438	87	0.219	132	0.824	177	0.705	222	0.347	267	0.930	312	0.553	357	0.282
43	0.435	88	0.218	133	0.840	178	0.686	223	0.348	268	0.941	313	0.533	358	0.288
44	0.432	89	0.216	134	0.856	179	0.666	224	0.350	269	0.951	314	0.513	359	0.294



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ELEVATION PATTERN

RMS Gain at Main Lobe	22.00 (13.42 dB)	Beam Tilt	0.70 deg
RMS Gain at Horizontal	13.80 (11.40 dB)	Frequency	515.00 MHz
Calculated / Measured	Calculated	Drawing #	30Q22007N-90





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TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **30Q22007N-90**

Angle	Field										
-10.0	0.160	2.4	0.400	10.6	0.093	30.5	0.050	51.0	0.046	71.5	0.039
-9.5	0.107	2.6	0.331	10.8	0.098	31.0	0.037	51.5	0.024	72.0	0.047
-9.0	0.038	2.8	0.275	11.0	0.103	31.5	0.019	52.0	0.007	72.5	0.058
-8.5	0.068	3.0	0.231	11.5	0.108	32.0	0.016	52.5	0.024	73.0	0.068
-8.0	0.071	3.2	0.199	12.0	0.091	32.5	0.019	53.0	0.035	73.5	0.078
-7.5	0.083	3.4	0.176	12.5	0.051	33.0	0.015	53.5	0.036	74.0	0.088
-7.0	0.202	3.6	0.162	13.0	0.019	33.5	0.025	54.0	0.026	74.5	0.096
-6.5	0.307	3.8	0.154	13.5	0.041	34.0	0.042	54.5	0.013	75.0	0.101
-6.0	0.326	4.0	0.151	14.0	0.045	34.5	0.050	55.0	0.021	75.5	0.105
-5.5	0.241	4.2	0.151	14.5	0.021	35.0	0.044	55.5	0.040	76.0	0.107
-5.0	0.108	4.4	0.151	15.0	0.018	35.5	0.026	56.0	0.055	76.5	0.108
-4.5	0.079	4.6	0.150	15.5	0.045	36.0	0.011	56.5	0.061	77.0	0.106
-4.0	0.092	4.8	0.146	16.0	0.048	36.5	0.022	57.0	0.056	77.5	0.103
-3.5	0.113	5.0	0.140	16.5	0.026	37.0	0.025	57.5	0.043	78.0	0.099
-3.0	0.289	5.2	0.132	17.0	0.011	37.5	0.018	58.0	0.024	78.5	0.093
-2.8	0.366	5.4	0.122	17.5	0.033	38.0	0.025	58.5	0.006	79.0	0.087
-2.6	0.432	5.6	0.112	18.0	0.033	38.5	0.048	59.0	0.022	79.5	0.081
-2.4	0.480	5.8	0.104	18.5	0.010	39.0	0.066	59.5	0.037	80.0	0.074
-2.2	0.502	6.0	0.096	19.0	0.021	39.5	0.070	60.0	0.046	80.5	0.067
-2.0	0.493	6.2	0.091	19.5	0.041	40.0	0.058	60.5	0.046	81.0	0.060
-1.8	0.452	6.4	0.089	20.0	0.037	40.5	0.037	61.0	0.038	81.5	0.054
-1.6	0.379	6.6	0.088	20.5	0.010	41.0	0.019	61.5	0.025	82.0	0.047
-1.4	0.276	6.8	0.090	21.0	0.029	41.5	0.019	62.0	0.019	82.5	0.041
-1.2	0.153	7.0	0.095	21.5	0.057	42.0	0.021	62.5	0.033	83.0	0.036
-1.0	0.075	7.2	0.101	22.0	0.062	42.5	0.017	63.0	0.053	83.5	0.031
-0.8	0.197	7.4	0.109	22.5	0.042	43.0	0.024	63.5	0.071	84.0	0.026
-0.6	0.359	7.6	0.116	23.0	0.011	43.5	0.041	64.0	0.084	84.5	0.022
-0.4	0.519	7.8	0.121	23.5	0.023	44.0	0.054	64.5	0.091	85.0	0.018
-0.2	0.666	8.0	0.125	24.0	0.033	44.5	0.054	65.0	0.090	85.5	0.015
0.0	0.792	8.2	0.125	24.5	0.022	45.0	0.039	65.5	0.084	86.0	0.012
0.2	0.891	8.4	0.123	25.0	0.002	45.5	0.014	66.0	0.073	86.5	0.010
0.4	0.959	8.6	0.118	25.5	0.023	46.0	0.014	66.5	0.059	87.0	0.007
0.6	0.995	8.8	0.112	26.0	0.031	46.5	0.038	67.0	0.045	87.5	0.005
0.8	0.997	9.0	0.105	26.5	0.019	47.0	0.051	67.5	0.034	88.0	0.004
1.0	0.970	9.2	0.098	27.0	0.005	47.5	0.048	68.0	0.027	88.5	0.002
1.2	0.918	9.4	0.093	27.5	0.027	48.0	0.031	68.5	0.026	89.0	0.001
1.4	0.845	9.6	0.089	28.0	0.036	48.5	0.009	69.0	0.027	89.5	0.000
1.6	0.758	9.8	0.087	28.5	0.026	49.0	0.027	69.5	0.029	90.0	0.000
1.8	0.665	10.0	0.086	29.0	0.005	49.5	0.050	70.0	0.030		
2.0	0.570	10.2	0.086	29.5	0.028	50.0	0.062	70.5	0.031		
2.2	0.481	10.4	0.089	30.0	0.047	50.5	0.060	71.0	0.034		