

**STATEMENT OF JOHN E. HIDLE, JR.  
IN SUPPORT OF AN APPLICATION FOR  
MODIFICATION OF CONSTRUCTION PERMIT  
BPCDT-19991029AGR  
WABM-DT BIRMINGHAM, ALABAMA  
TV - CH. 36 – 885 kW – 406.0 M HAAT**

**Prepared for: BIRMINGHAM (WABM-TV) LICENSEE, INC.**

**OCTOBER, 2004**

## TABLE OF CONTENTS

### FCC FORM 301 SECTIONS III AND III-D

	<u>PAGE</u>
Engineering Statement In Support Of An Application for Modification of Construction Permit.....	1
Exhibit 1 -           Vertical Plan Antenna Sketch.....	9
Exhibit 2 -           Horizontal Plane Antenna Pattern .....	10
Exhibit 3 -           Horizontal Plane Antenna Pattern Tabulation.....	11
Exhibit 4A & 4B -   Vertical Plane Antenna Pattern.....	12
Exhibit 5 -           Vertical Plane Antenna Pattern Tabulation.....	14
Exhibit 6 -           Predicted Coverage Contours Of Proposed Facility.....	15
Exhibit 7 -           Comparison of Coverage Contours .....	16
Appendix A -         Radiofrequency Radiation Study.....	17



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**Prepared for: BIRMINGHAM (WABM-TV) LICENSEE, INC.**

I am an Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission.

**GENERAL**

This office has been authorized by Birmingham (WABM-TV) Licensee, Inc., permittee of WABM-DT, channel 36, Birmingham, Alabama, to prepare this statement, FCC Form 301, Sections III and III-D, and the associated exhibits in support of an Application to Modify WABM-DT's facility as authorized in its outstanding construction permit, FCC file number BPCDT-19991029AGR. This Application complies with the Freeze on the Filing of Certain TV and DTV Requests for Allotment and Service Area Changes, FCC Public Notice DA 04-2446, because the instant proposed modifications

STATEMENT OF JOHN E. HIDLE, JR.  
WABM-DT – BIRMINGHAM, ALABAMA  
PAGE 2

would not extend the currently licensed service area of WABM-DT in any azimuthal direction. (See Exhibit 7). Therefore, this application is acceptable for filing.

It is proposed herein that the existing Construction Permit of WABM-DT be modified to authorize the relocation of WABM-DT's authorized antenna to a new tower at the currently authorized site. The new tower, FCC Antenna Structure Registration Number 1226663, located at 33° 29' 04.8" NL, 086° 48' 25.1" WL, (NAD-83) is necessary to accommodate the weight of antennas for both the NTSC and DTV facilities of WABM-DT and a number of other stations located at the site. As a result of the required stacking reconfiguration of the antennas on the new tower, this application requests authorization for a decrease in antenna centerline height above mean sea level for the WABM-DT antenna from 601.0 meters to 595.2 meters; a decrease of 5.8 meters. The radiation centerline height above average terrain (HAAT) as calculated from the new site decreases from 409.0 meters to 406.0 meters, a net decrease of 3.0 meters. Based upon the new HAAT, maintaining the same distance to the 41 dBu F(50,90) (Grade B equivalent) contour will require an increase in effective radiated power (ERP) from 850 kW to 885 kW. With the exception of the specification of a new tower structure, the decrease in height and the increase in power, all other characteristics of the authorized WABM-DT technical facility, including its geographic coordinates and the use of its presently authorized directional transmitting antenna, will remain essentially unchanged.

### **PROPOSED DIRECTIONAL ANTENNA**

The permittee of WABM-DT requests authorization herein to utilize its authorized directional transmitting antenna, a Dielectric model TFU-26DSC-R C170, mounted in a stacked configuration, supporting the transmitting antenna for the analog facilities of WTTO(TV) channel 21, Homewood, Alabama. The antenna stack will be located on the newly constructed tower at the existing WABM-DT coordinates at 33° 29' 04" North Latitude, 086° 48' 25" West Longitude, (NAD-27) Antenna Structure Registration Number 1226663. A vertical plan antenna sketch, detailing the position of the antenna on the tower is attached as Exhibit 1. The antenna manufacturer's horizontal plane radiation pattern is shown in Exhibit 2 and tabulated in Exhibit 3. The antenna manufacturer's vertical plane radiation pattern, illustrating the proposed antenna's radiation characteristics above and below the horizontal plane, is shown in Exhibits 4A and 4B, and tabulated in Exhibit 5.

### **PREDICTED COVERAGE CONTOURS**

The predicted coverage contours were calculated in accordance with the method described in Section 73.625 of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, the antenna site elevation and coordinates were determined from the National Geophysical Data Center Thirty Second Point Database (TPG-0050) as prescribed in the FCC Rules. Exhibit 6 shows that the

predicted 48 dBu F(50,90) principal community contour completely encompasses the principal community of license as required by Section 73.625(1) of the Commission's Rules. The predicted 41 dBu (Grade B equivalent) contour is also shown in Exhibit 6.

## **ALLOCATION CONSIDERATIONS**

### **Full Service Television Considerations**

An interference study was performed, using the Commission's application analysis program, "TV-Process," to ensure that the proposed WABM-DT facility is in compliance with the Commission's *de minimis* interference requirements in regard to full service NTSC and DTV stations. TV-Process indicated no unacceptable interference to the authorized or requested facility of any full service NTSC or DTV station.

### **Class A Television Allocation Considerations**

As required in Section 73.613 of the FCC's Rules, as established in the Report and Order establishing Class A Television Service, released April 4, 2000, a study of interference contour overlap was performed, based on the WABM-DT facility proposed herein, to establish compliance with the protection requirements contained therein. Results of the contour overlap study indicate that the instant proposal will result in no increase in prohibited contour overlap of LPTV stations which have obtained Class A status.

## **BLANKETING AND INTERMODULATION INTERFERENCE**

A number of broadcast and non-broadcast facilities are located within 10 km of the proposed WABM-DT transmitter/antenna site. The applicant recognizes its responsibility to remedy complaints of interference created by this proposal in accordance with applicable Rules.

## **ENVIRONMENTAL CONSIDERATIONS**

### **RADIO FREQUENCY IMPACT**

The Commission's guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions were adopted October 15, 1997. The guidelines are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986), and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, LLC (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The guidelines provide a maximum permissible exposure (MPE) level for occupational or "controlled" situations that apply in cases that affect the general public. The FCC Office of Engineering and Technology's technical bulletin No. 65 entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (Edition 97-01, August 1997), provides assistance in the determination of whether FCC-regulated transmitting facilities, operations or devices comply with guideline limits for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. Bulletin No. 65 contains the

technical information necessary to evaluate compliance with the FCC's policies and guidelines.

The FCC's Maximum Permitted Exposure (MPE) level for "uncontrolled" environments is 0.2 milliwatts per centimeter squared ( $\text{mW}/\text{cm}^2$ ) when applied to broadcast facilities operating between 30 MHz and 300 MHz, and for broadcast facilities operating between 300 MHz and 1500 MHz, primarily UHF TV stations, is derived from the formula,  $(\text{frequency}/1500)$ . The MPE level for "controlled" environments is 1.0 milliwatts per centimeter squared ( $\text{mW}/\text{cm}^2$ ) for operations between 30 MHz and 300 MHz, and for broadcast stations operating between 300 MHz and 1500 MHz in a "controlled" environment is derived from the formula,  $(\text{frequency}/300)$ . The predicted emissions of WABM-DT channel 36 must be considered, along with the predicted emissions from other proposed and existing stations at the current site. For WABM-DT, which will operate on channel 23 (527 MHz), the MPE level for "uncontrolled" environments is  $0.351 \text{ mW}/\text{cm}^2$ , and for "controlled" environments is  $1.755 \text{ mW}/\text{cm}^2$ .

The proposed WABM-DT facility, channel 36, will operate with a maximum ERP of 885 kW from a horizontally polarized directional transmitting antenna with a centerline height of 306.5 meters above ground level (AGL). Considering a very conservative vertical plane relative field factor of 0.3, the WABM-DT facility produces a predicted power density at two meters above ground level of  $0.02869 \text{ mW}/\text{cm}^2$ , which is 7.11% of the FCC guideline value for "uncontrolled" environments, and 1.422% of the FCC guideline value for "controlled" environments.



As shown in Appendix A, the total predicted percentage of the MPE value at the new tower site, considering the cumulative predicted radiation of all of the stations which are located at the site, is only 64.75% of the limit for "uncontrolled" environments, and 12.95% of the limit for "controlled" environments.<sup>1</sup> The site is therefore in compliance with the FCC's Maximum Permitted Exposure guidelines.

### **OCCUPATIONAL SAFETY**

The licensee of WABM-DT is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WABM-DT antenna. The applicant is committed to reducing power and/or ceasing operation during times of service or maintenance of the transmission systems, when necessary, to ensure protection to personnel. In light of the above, the proposed modification of the WABM-DT facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

### **SUMMARY**

It is submitted that the proposal described herein complies with the Rules and Regulations of the Federal Communications Commission. This statement, FCC Form 301,

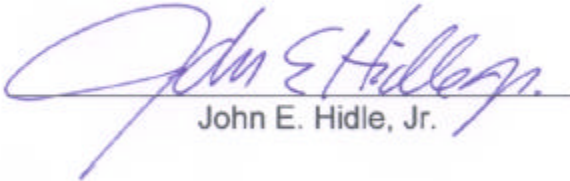
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<sup>1</sup> Note: Predicted vertical relative field factor values for WZZK-FM, WENN(FM), and WBPT(FM) were determined based upon documentation submitted by the applicants for these facilities as found in the Commissions files accessible on the "CDBS Public Access" website. Values for other facilities included in the study were determined by assuming very conservative vertical relative field factor values of 0.3 for horizontally polarized analog and digital television antennas, and 1.0 for circularly polarized FM antennas.

STATEMENT OF JOHN E. HIDLE, JR.  
WABM-DT – BIRMINGHAM, ALABAMA  
PAGE 8

Sections III and III-D, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

**Dated: October 26, 2004**

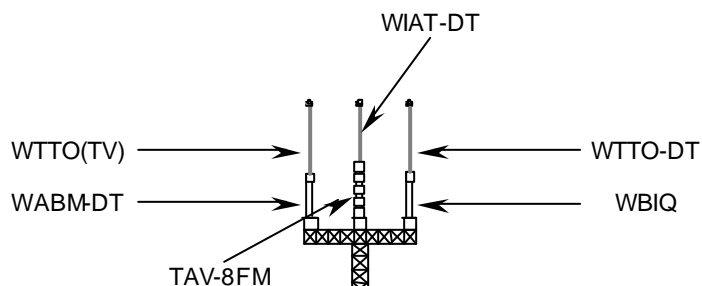


John E. Hidle, Jr.

COORDINATES NAD-27

NORTH LATITUDE: 33° 29' 04.0"

WEST LONGITUDE: 86° 48' 25.0"



OVERALL HEIGHT

RCL

<u>AGL</u>	<u>AMSL</u>
335.9 m	624.6 m
RCL	
306.5 m	595.2 m

GROUND ELEVATION = 288.7 meters A.M.S.L. / AVERAGE TERRAIN = 187.165 meters A.M.S.L.

**VERTICAL PLAN ANTENNA SKETCH**

WABM-DT - BIRMINGHAM, ALABAMA

Ch. 36 - 885 kW ERP - 406.0 m HAAT

DIRECTIONAL ANTENNA (TFU-26DSC-R C170)

OCTOBER, 2004

**CARL T. JONES**  
CORPORATION

NOTE : NOT DRAWN TO SCALE



Proposal Number

**DCA-9608**

EXHIBIT 2

Date

**11-Jan-02**

Call Letters

**WABM-DT**

Channel

**36**

Location

**Birmingham, AL**

Customer

Antenna Type

**TFU-26DSC-R C170**

## AZIMUTH PATTERN

Gain

**1.70**

**( 2.30 dB)**

Calculated / Measured

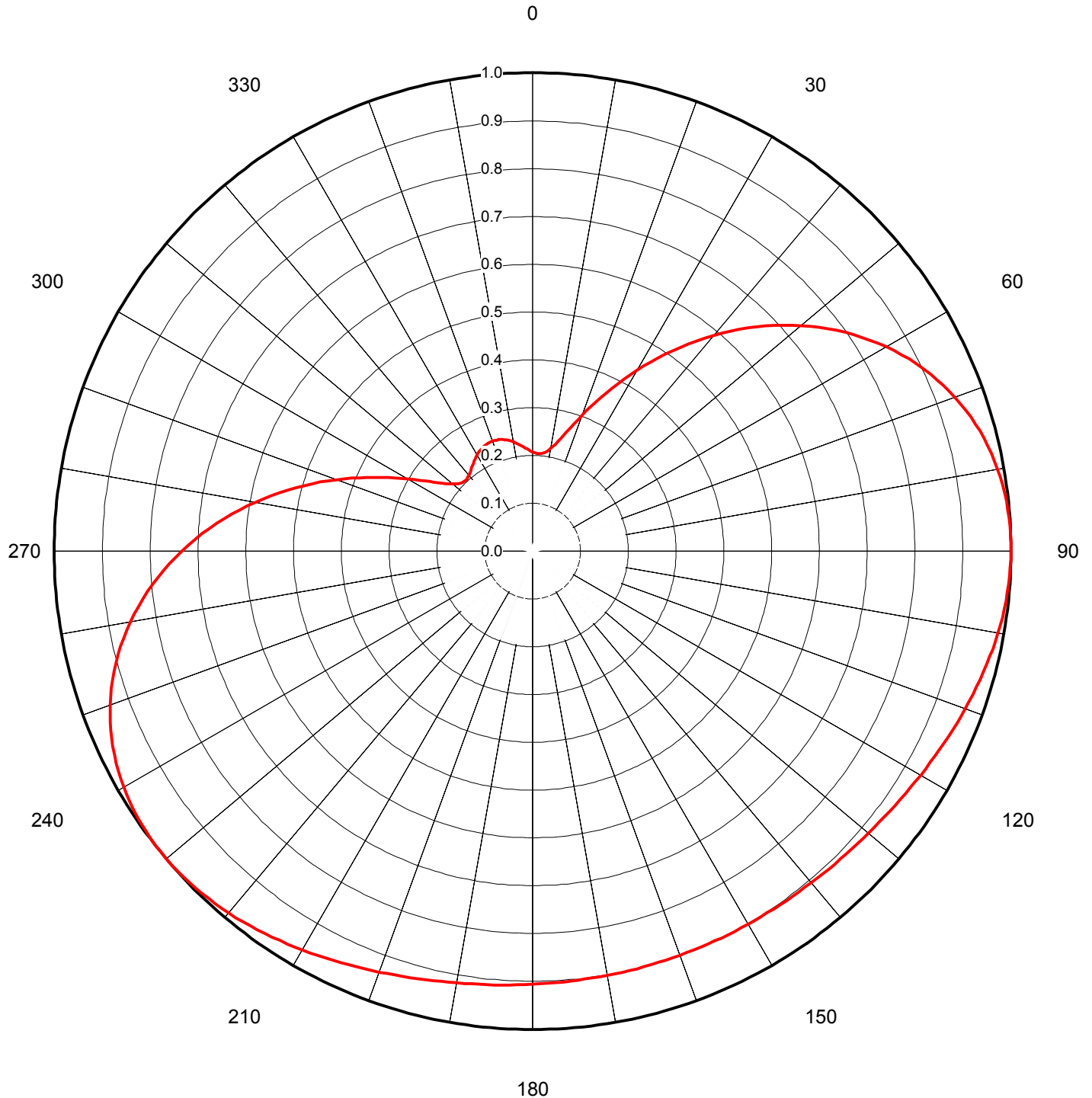
**Calculated**

Frequency

**605.00 MHz**

Drawing #

**TFU-C170-36**





Proposal Number **DCA-9608** EXHIBIT 3  
 Date **11-Jan-02**  
 Call Letters **WABM-DT** Channel **36**  
 Location **Birmingham, AL**  
 Customer  
 Antenna Type **TFU-26DSC-R C170**

## TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TFU-C170-36**

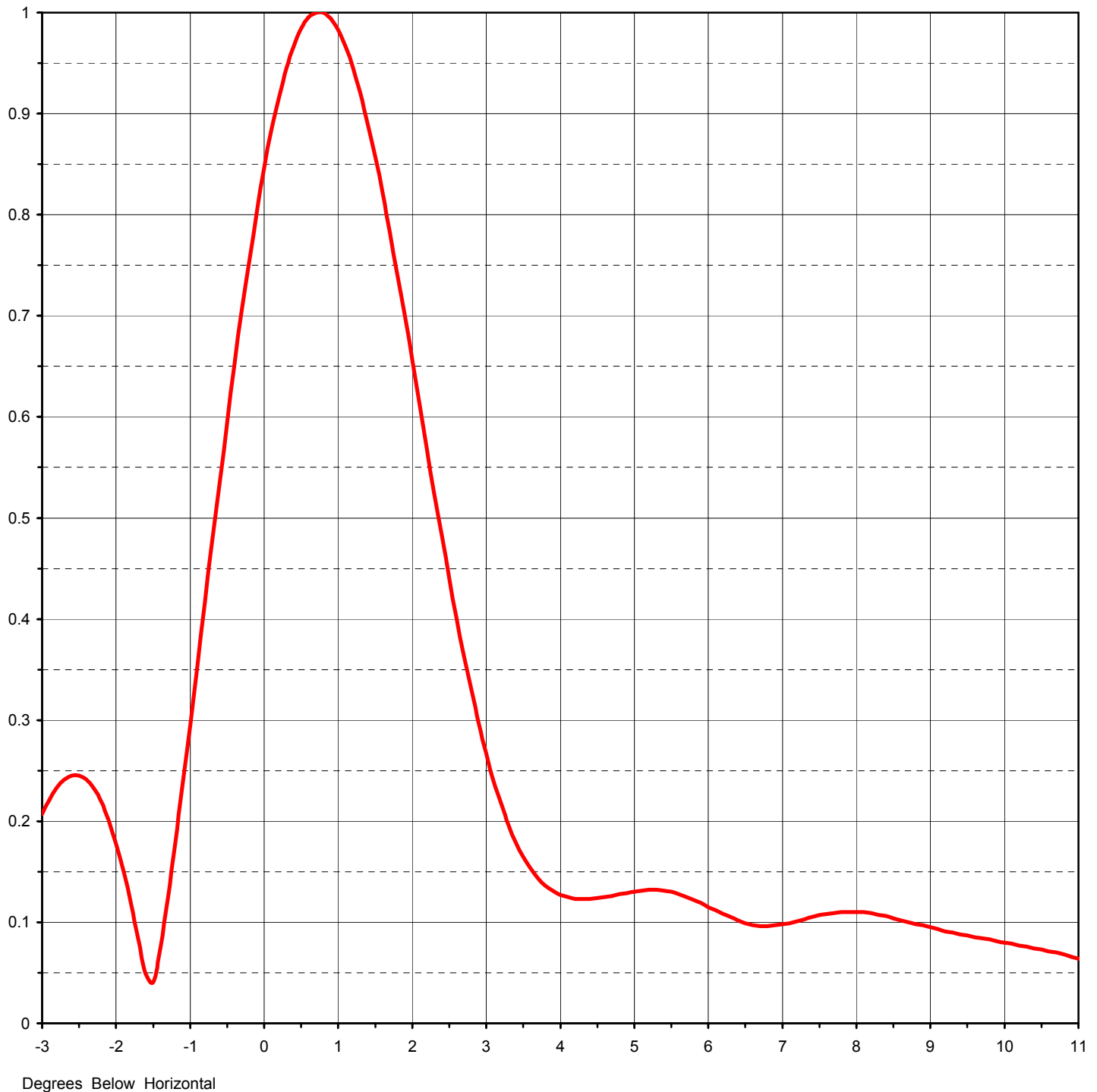
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.207	45	0.663	90	1.000	135	0.910	180	0.905	225	0.996	270	0.733	315	0.204
1	0.206	46	0.677	91	1.000	136	0.909	181	0.906	226	0.997	271	0.720	316	0.204
2	0.205	47	0.692	92	0.999	137	0.908	182	0.907	227	0.998	272	0.706	317	0.204
3	0.204	48	0.706	93	0.998	138	0.907	183	0.908	228	0.999	273	0.692	318	0.205
4	0.204	49	0.720	94	0.997	139	0.906	184	0.909	229	1.000	274	0.677	319	0.206
5	0.204	50	0.733	95	0.996	140	0.905	185	0.910	230	1.000	275	0.663	320	0.207
6	0.206	51	0.747	96	0.995	141	0.905	186	0.911	231	1.000	276	0.648	321	0.209
7	0.207	52	0.760	97	0.993	142	0.904	187	0.912	232	1.000	277	0.634	322	0.211
8	0.210	53	0.773	98	0.992	143	0.903	188	0.914	233	0.999	278	0.619	323	0.214
9	0.214	54	0.785	99	0.990	144	0.903	189	0.915	234	0.998	279	0.604	324	0.216
10	0.218	55	0.797	100	0.988	145	0.902	190	0.917	235	0.997	280	0.588	325	0.219
11	0.223	56	0.809	101	0.986	146	0.902	191	0.918	236	0.996	281	0.573	326	0.222
12	0.229	57	0.821	102	0.983	147	0.901	192	0.920	237	0.994	282	0.558	327	0.224
13	0.235	58	0.832	103	0.981	148	0.901	193	0.922	238	0.992	283	0.543	328	0.227
14	0.243	59	0.843	104	0.978	149	0.901	194	0.924	239	0.990	284	0.527	329	0.229
15	0.251	60	0.854	105	0.976	150	0.900	195	0.926	240	0.987	285	0.512	330	0.232
16	0.260	61	0.864	106	0.973	151	0.900	196	0.928	241	0.984	286	0.497	331	0.234
17	0.269	62	0.874	107	0.971	152	0.900	197	0.930	242	0.981	287	0.482	332	0.236
18	0.280	63	0.883	108	0.968	153	0.900	198	0.932	243	0.977	288	0.466	333	0.238
19	0.290	64	0.893	109	0.965	154	0.900	199	0.934	244	0.973	289	0.451	334	0.240
20	0.302	65	0.901	110	0.963	155	0.900	200	0.936	245	0.968	290	0.437	335	0.241
21	0.313	66	0.910	111	0.960	156	0.899	201	0.939	246	0.963	291	0.422	336	0.242
22	0.326	67	0.918	112	0.957	157	0.899	202	0.941	247	0.958	292	0.407	337	0.243
23	0.338	68	0.925	113	0.954	158	0.899	203	0.944	248	0.952	293	0.393	338	0.244
24	0.352	69	0.933	114	0.952	159	0.899	204	0.946	249	0.946	294	0.379	339	0.244
25	0.365	70	0.940	115	0.949	160	0.899	205	0.949	250	0.940	295	0.365	340	0.245
26	0.379	71	0.946	116	0.946	161	0.899	206	0.952	251	0.933	296	0.352	341	0.244
27	0.393	72	0.952	117	0.944	162	0.899	207	0.954	252	0.925	297	0.338	342	0.244
28	0.407	73	0.958	118	0.941	163	0.899	208	0.957	253	0.918	298	0.326	343	0.243
29	0.422	74	0.963	119	0.939	164	0.899	209	0.960	254	0.910	299	0.313	344	0.242
30	0.437	75	0.968	120	0.936	165	0.900	210	0.963	255	0.901	300	0.302	345	0.241
31	0.451	76	0.973	121	0.934	166	0.900	211	0.965	256	0.893	301	0.290	346	0.240
32	0.466	77	0.977	122	0.932	167	0.900	212	0.968	257	0.883	302	0.280	347	0.238
33	0.482	78	0.981	123	0.930	168	0.900	213	0.971	258	0.874	303	0.269	348	0.236
34	0.497	79	0.984	124	0.928	169	0.900	214	0.973	259	0.864	304	0.260	349	0.234
35	0.512	80	0.987	125	0.926	170	0.900	215	0.976	260	0.854	305	0.251	350	0.232
36	0.527	81	0.990	126	0.924	171	0.901	216	0.978	261	0.843	306	0.243	351	0.229
37	0.543	82	0.992	127	0.922	172	0.901	217	0.981	262	0.832	307	0.235	352	0.227
38	0.558	83	0.994	128	0.920	173	0.901	218	0.983	263	0.821	308	0.229	353	0.224
39	0.573	84	0.996	129	0.918	174	0.902	219	0.986	264	0.809	309	0.223	354	0.222
40	0.588	85	0.997	130	0.917	175	0.902	220	0.988	265	0.797	310	0.218	355	0.219
41	0.604	86	0.998	131	0.915	176	0.903	221	0.990	266	0.785	311	0.214	356	0.216
42	0.619	87	0.999	132	0.914	177	0.903	222	0.992	267	0.773	312	0.210	357	0.214
43	0.634	88	1.000	133	0.912	178	0.904	223	0.993	268	0.760	313	0.207	358	0.211
44	0.648	89	1.000	134	0.911	179	0.905	224	0.995	269	0.747	314	0.206	359	0.209



Proposal Number	<b>DCA-9608</b>	EXHIBIT 4A
Date	<b>11-Jan-02</b>	
Call Letters	<b>WABM-DT</b>	Channel <b>36</b>
Location	<b>Birmingham, AL</b>	
Customer		
Antenna Type	<b>TFU-26DSC-R C170</b>	

## ELEVATION PATTERN

RMS Gain at Main Lobe	<b>22.50 ( 13.52 dB )</b>	Beam Tilt	<b>0.75 deg</b>
RMS Gain at Horizontal	<b>16.10 ( 12.07 dB )</b>	Frequency	<b>605.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>26Q225075</b>

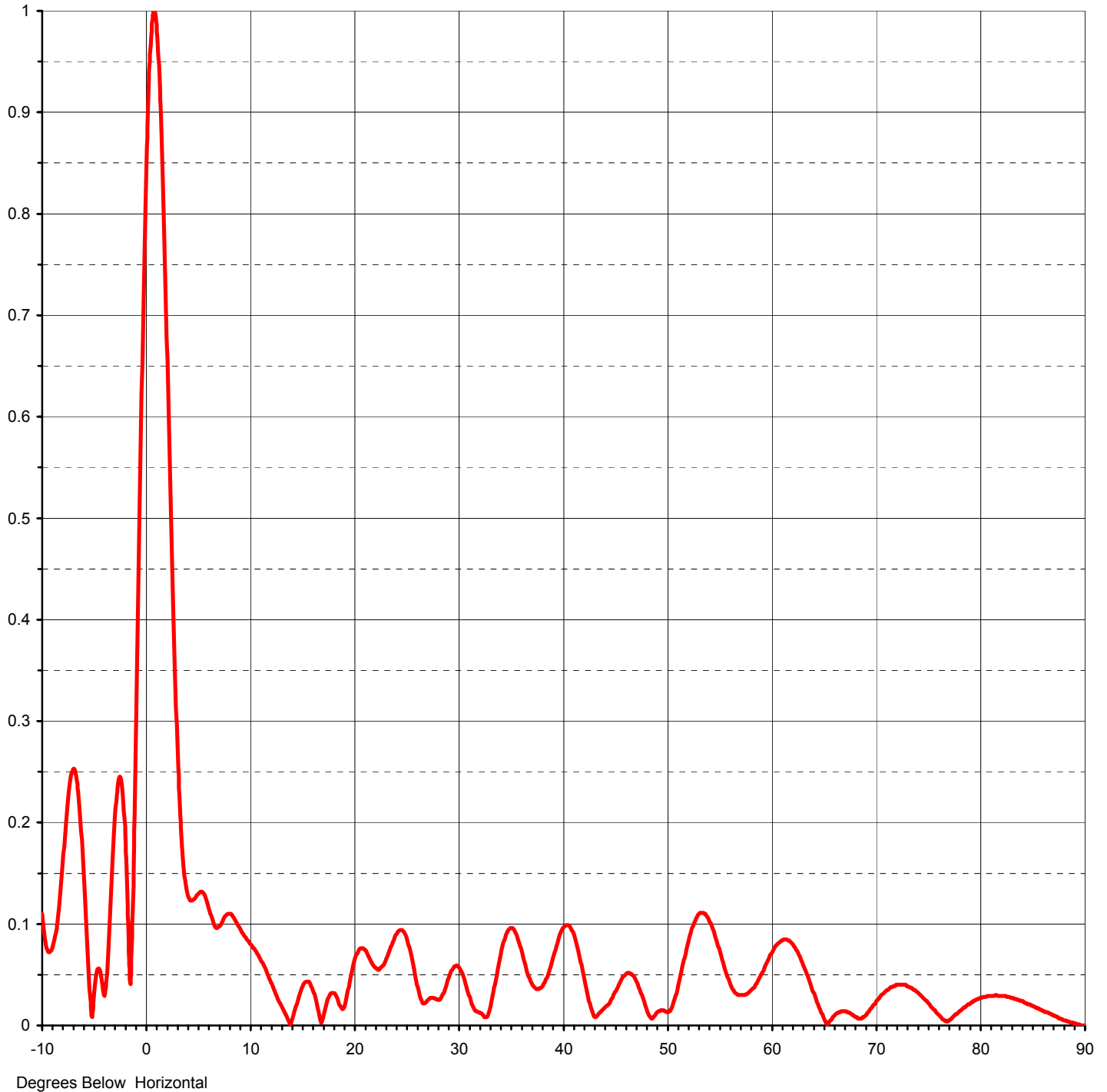




Proposal Number	<b>DCA-9608</b>	EXHIBIT 4B
Date	<b>11-Jan-02</b>	
Call Letters	<b>WABM-DT</b>	Channel <b>36</b>
Location	<b>Birmingham, AL</b>	
Customer		
Antenna Type	<b>TFU-26DSC-R C170</b>	

## ELEVATION PATTERN

RMS Gain at Main Lobe	<b>22.50 ( 13.52 dB )</b>	Beam Tilt	<b>0.75 deg</b>
RMS Gain at Horizontal	<b>16.10 ( 12.07 dB )</b>	Frequency	<b>605.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>26Q225075-90</b>





Proposal Number **DCA-9608**

EXHIBIT 5

Date **11-Jan-02**

Call Letters **WABM-DT** Channel **36**

Location **Birmingham, AL**

Customer

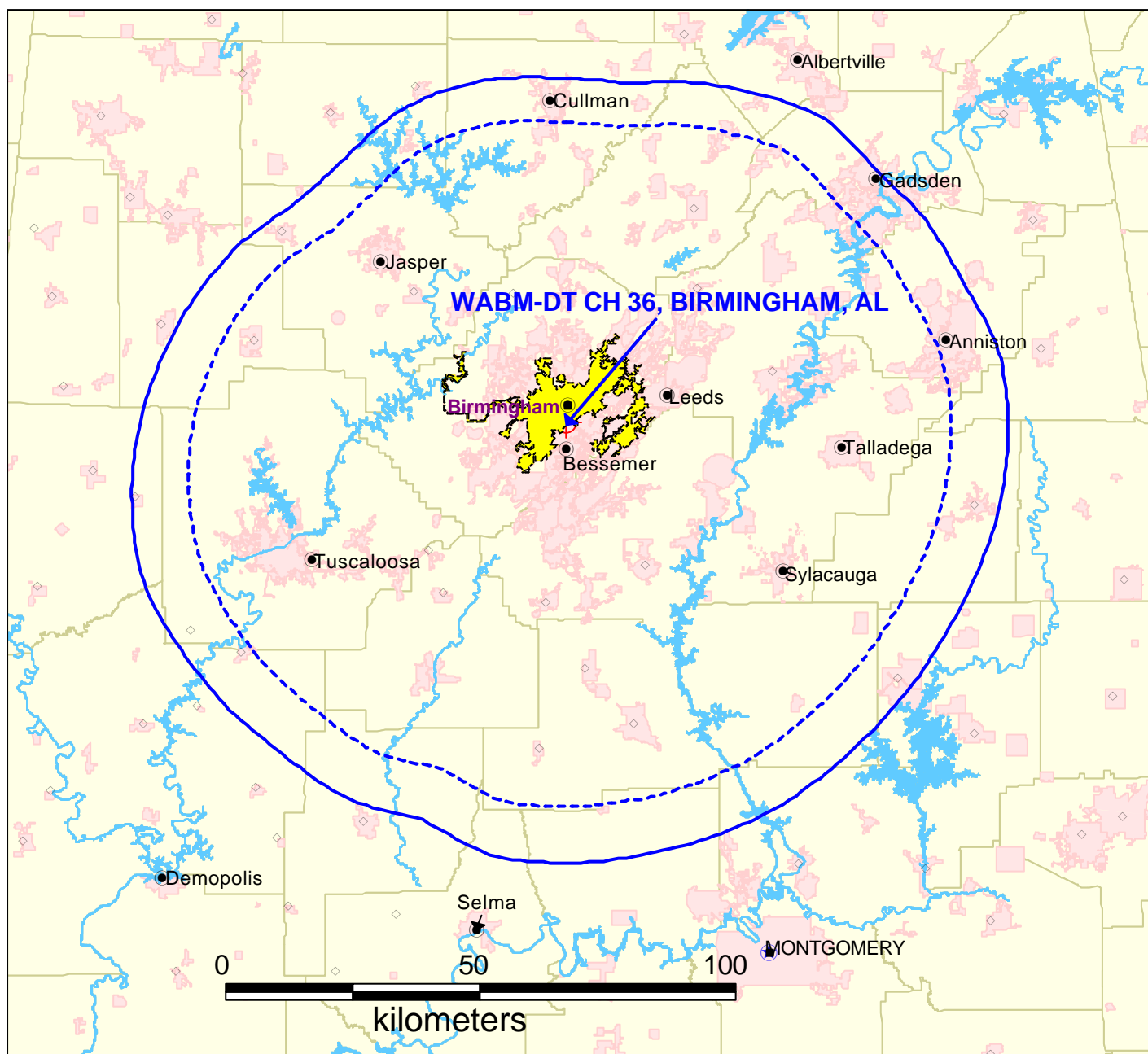
Antenna Type **TFU-26DSC-R C170**

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **26Q225075-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.110	2.4	0.482	10.6	0.073	30.5	0.048	51.0	0.035	71.5	0.038
-9.5	0.074	2.6	0.401	10.8	0.070	31.0	0.031	51.5	0.058	72.0	0.040
-9.0	0.077	2.8	0.329	11.0	0.066	31.5	0.017	52.0	0.080	72.5	0.040
-8.5	0.106	3.0	0.267	11.5	0.056	32.0	0.013	52.5	0.098	73.0	0.039
-8.0	0.163	3.2	0.217	12.0	0.044	32.5	0.008	53.0	0.109	73.5	0.036
-7.5	0.225	3.4	0.179	12.5	0.031	33.0	0.015	53.5	0.111	74.0	0.032
-7.0	0.253	3.6	0.153	13.0	0.020	33.5	0.040	54.0	0.105	74.5	0.027
-6.5	0.225	3.8	0.136	13.5	0.010	34.0	0.066	54.5	0.093	75.0	0.022
-6.0	0.146	4.0	0.127	14.0	0.004	34.5	0.087	55.0	0.076	75.5	0.016
-5.5	0.046	4.2	0.123	14.5	0.021	35.0	0.096	55.5	0.058	76.0	0.010
-5.0	0.034	4.4	0.123	15.0	0.037	35.5	0.091	56.0	0.043	76.5	0.005
-4.5	0.055	4.6	0.125	15.5	0.043	36.0	0.076	56.5	0.033	77.0	0.005
-4.0	0.029	4.8	0.128	16.0	0.037	36.5	0.057	57.0	0.030	77.5	0.010
-3.5	0.109	5.0	0.130	16.5	0.018	37.0	0.042	57.5	0.030	78.0	0.014
-3.0	0.207	5.2	0.132	17.0	0.007	37.5	0.036	58.0	0.034	78.5	0.018
-2.8	0.233	5.4	0.131	17.5	0.026	38.0	0.038	58.5	0.040	79.0	0.022
-2.6	0.245	5.6	0.128	18.0	0.032	38.5	0.047	59.0	0.049	79.5	0.025
-2.4	0.241	5.8	0.122	18.5	0.024	39.0	0.063	59.5	0.060	80.0	0.027
-2.2	0.219	6.0	0.115	19.0	0.017	39.5	0.081	60.0	0.071	80.5	0.028
-2.0	0.178	6.2	0.108	19.5	0.038	40.0	0.095	60.5	0.079	81.0	0.029
-1.8	0.118	6.4	0.102	20.0	0.062	40.5	0.099	61.0	0.084	81.5	0.030
-1.6	0.049	6.6	0.097	20.5	0.075	41.0	0.092	61.5	0.085	82.0	0.029
-1.4	0.076	6.8	0.096	21.0	0.075	41.5	0.074	62.0	0.081	82.5	0.028
-1.2	0.178	7.0	0.098	21.5	0.066	42.0	0.050	62.5	0.073	83.0	0.027
-1.0	0.295	7.2	0.101	22.0	0.057	42.5	0.026	63.0	0.062	83.5	0.025
-0.8	0.416	7.4	0.105	22.5	0.056	43.0	0.009	63.5	0.049	84.0	0.024
-0.6	0.537	7.6	0.108	23.0	0.063	43.5	0.012	64.0	0.034	84.5	0.021
-0.4	0.652	7.8	0.110	23.5	0.076	44.0	0.017	64.5	0.018	85.0	0.019
-0.2	0.756	8.0	0.110	24.0	0.089	44.5	0.022	65.0	0.006	85.5	0.017
0.0	0.846	8.2	0.109	24.5	0.094	45.0	0.032	65.5	0.004	86.0	0.014
0.2	0.917	8.4	0.106	25.0	0.088	45.5	0.042	66.0	0.010	86.5	0.012
0.4	0.967	8.6	0.102	25.5	0.069	46.0	0.050	66.5	0.013	87.0	0.010
0.6	0.995	8.8	0.098	26.0	0.043	46.5	0.051	67.0	0.014	87.5	0.007
0.8	1.000	9.0	0.095	26.5	0.024	47.0	0.045	67.5	0.012	88.0	0.005
1.0	0.983	9.2	0.091	27.0	0.024	47.5	0.033	68.0	0.008	88.5	0.004
1.2	0.945	9.4	0.088	27.5	0.027	48.0	0.018	68.5	0.007	89.0	0.002
1.4	0.890	9.6	0.085	28.0	0.025	48.5	0.007	69.0	0.010	89.5	0.001
1.6	0.821	9.8	0.084	28.5	0.030	49.0	0.012	69.5	0.017	90.0	0.000
1.8	0.741	10.0	0.081	29.0	0.045	49.5	0.015	70.0	0.024		
2.0	0.656	10.2	0.079	29.5	0.056	50.0	0.013	70.5	0.030		
2.2	0.568	10.4	0.076	30.0	0.058	50.5	0.018	71.0	0.035		



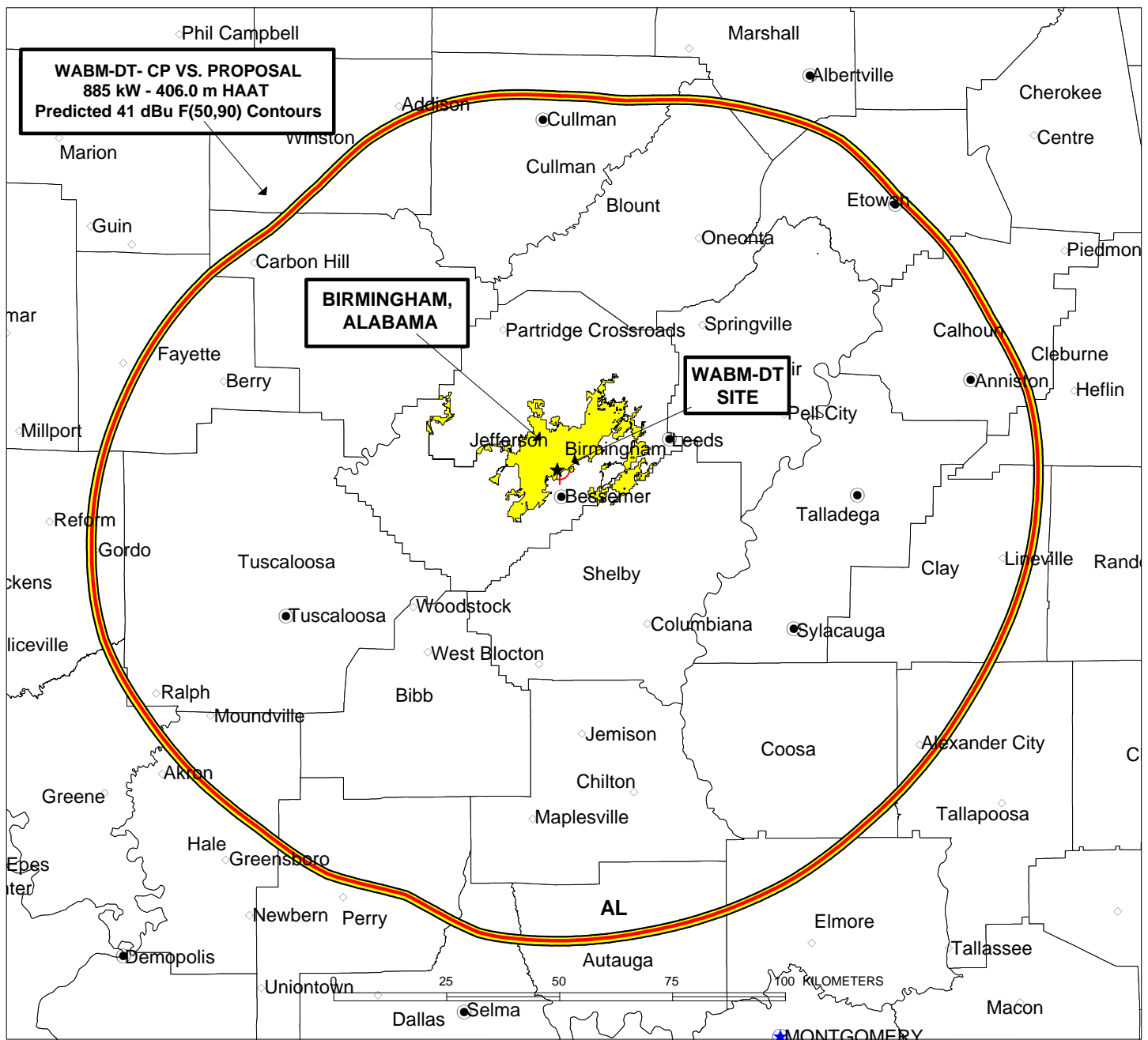


**PREDICTED COVERAGE CONTOURS**

**PROPOSED WABM-DT CH 36, BIRMINGHAM, AL**  
**406 mHAAT, 595.2 mRCAMSL**  
**885 kW, DIE TFU-29JSC C170 (39522)**


Predicted F(50,90) 48 dBu  
 Area : 22,830 Sq. km.  
 Pop Count : 1,351,222


Predicted F(50,90) 41 dBu  
 Area : 29,960 Sq. km.  
 Pop Count : 1,581,997



## COMPARISON OF COVERAGE CONTOURS

**WABM-DT, BIRMINGHAM, ALABAMA**  
885 kW ERP; 406.0 m HAAT; DIRECTIONAL  
OCTOBER, 2004

 **Proposed Facility**  
885 kW ERP; 406.0 m HAAT; Directional  
Predicted "Grade B Equivalent" Contour  
F(50,90) - 41 dBu

 **Authorized Construction Permit Facility**  
850 kW ERP; 409 m HAAT; Directional  
Predicted "Grade B Equivalent" Contour  
F(50,90) - 41 dBu

**CARL T. JONES**  
**CORPORATION**

**SUMMARY OF RADIOFREQUENCY  
RADIATION STUDY**  
WABM-DT, BIRMINGHAM, ALABAMA  
CHANNEL 36, 885 kW ERP, 406.0 m HAAT  
OCTOBER, 2004

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLARIZATION</u>	<u>ANTENNA HEIGHT ** mAGL</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>PREDICTED POWER DENSITY (mW/cm<sup>2</sup>)</u>	<u>FCC UNCONTROLLED LIMIT (mW/cm<sup>2</sup>)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
WBIQ(TV)	TV	10	195	H	309.9	316.000	0.300	0.00495	0.200	2.47%
WTTO(TV)	TV	21	515	H	322.9	920.000	0.300	0.01327	0.343	3.86%
WBUN-CA	TV	24	533	H	187.5	3.500	0.300	0.00015	0.355	0.04%
WTTO-DT	DT	28	557	H	325.7	765.000	0.300	0.02168	0.371	5.84%
WIAT-DT	DT	30	569	H	324.3	1000.000	0.300	0.02858	0.379	7.53%
WABM-DT	DT	36	605	H	304.5	# 885.000	0.300	0.02869	0.403	7.11%
W46DK	TV	46	665	H	126.4	15.100	0.300	0.00142	0.443	0.32%
WODL(FM)	FM	247	97.3	H & V	306.3	6.200	1.000	0.00442	0.200	2.21%
WBHK(FM)	FM	254	98.7	H & V	310.3	39.000	1.000	0.02706	0.200	13.53%
WZZK-FM	FM	284	104.7	H & V	306.3	97.800	0.210	0.00307	0.200	1.54%
WENN(FM)	FM	288	105.5	H & V	92.3	29.500	0.177	0.00727	0.200	3.63%
WBPT(FM)	FM	295	106.9	H & V	306.3	97.000	0.210	0.00305	0.200	1.52%
WRAX(FM)	FM	299	107.7	H & V	306.3	42.500	1.000	0.03027	0.200	15.13%

**TOTAL PERCENTAGE OF ANSI VALUE= 64.75%**

*\*\* The antenna heights indicated above are 2 meters less than the actual antenna heights so that the predicted power densities consider the 2 meter human height allowance.*