

**STATEMENT OF JOHN E. HIDLE, JR.  
IN SUPPORT OF AN  
APPLICATION FOR CONSTRUCTION PERMIT  
FOR POST-TRANSITION  
“APPENDIX B CHECKLIST” FACILITIES  
WLOS-DT - ASHEVILLE, NORTH CAROLINA  
DTV - CH. 13, 29.8 kW, 853 M HAAT**

**Prepared for: WLOS LICENSEE, LLC**

**MARCH, 2008**

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DTV - CH. 13, 29.8 kW, 853 M HAAT**

Prepared for: WLOS Licensee, LLC

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**

WLOS Licensee, LLC, licensee of WLOS(TV), Channel 13, Asheville, North Carolina, and applicant for a Construction Permit for the paired Digital Television Allotment for WLOS-DT, to operate on its current analog Channel 13 after the digital transition, has authorized this office to prepare this statement, FCC Form 301, Sections III and III-D and associated exhibits to be made a part of an Application for Construction Permit for its post-transition DTV Facility, on its current analog channel 13 as reflected in “Appendix B” of the SEVENTH FURTHER NOTICE OF PROPOSED RULEMAKING, adopted October 10, 2006 (MB Docket 87-268).

### **PROPOSED TECHNICAL FACILITIES**

It is proposed herein to implement the post-transition facilities of WLOS-DT on channel 13 utilizing a directional transmitting antenna, a Dielectric model THB-C3-6/18-1 utilizing a “cardioid” directional azimuth pattern, a HAAT of 853 meters and an ERP of 29.8 kW, side-mounted on the existing antenna support structure, FCC antenna structure registration number 1035173, with the antenna radiation centerline at 93.0 meters above ground level (AGL). A Vertical Plan Antenna Sketch is shown in 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 existing antenna's radiation characteristics above and below the horizontal plane, is shown in Exhibits 4 and 5 and tabulated in Exhibit 6.

### **PREDICTED COVERAGE CONTOURS**

The predicted coverage contours were calculated in accordance with the method described in Section 73.625 of the FCC's Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699), 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 13 kilometers from the site, the antenna site elevation and coordinates were determined from those reflected in FCC antenna structure registration number 1035173. As shown in Exhibit 7, the predicted 43 dBu, (F50,90) principal community contour completely encompasses the principal community of license as required

by the Commission's rules. The predicted 36 dBu (F 50,90) "protected coverage contour" is also shown in Exhibit 7. Exhibit 7 also shows that the 36 dBu F(50,90) contour of the instant proposed facility does not exceed that of the Appendix B Facility. This proposal therefore meets the requirements for expedited processing.

### **ALLOCATION CONSIDERATIONS**

The Seventh Report and Order and Eighth Further NPRM (MB Docket 87-268) includes the recently adopted DTV Table of Allotments that identifies the specific technical facilities at which the Commission has proposed to allow DTV stations to operate after the DTV transition. In the sense that the instant proposed technical facility for which authorization is being sought is essentially identical to the technical facility as outlined in the Final DTV Table of Allotments, it is presumed that this request will be treated in similar fashion to a "checklist application" for facilities as reflected in the initial DTV Table.

### **BLANKETING AND INTERMODULATION INTERFERENCE**

A number of broadcast and non-broadcast facilities are located within 10 km of the proposed WLOS-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**

Effective October 15, 1997, the FCC adopted guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions. 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, (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, (frequency/300).

The predicted emissions of WLOS-DT channel 13 must be considered, along with the predicted emissions of other stations that will operate from its site and within 315 km after the digital transition. For WLOS-DT, which will operate on channel 13 (213 MHz), the MPE level for “uncontrolled” environments is  $0.411 \text{ mW}/\text{cm}^2$ , and for “controlled” environments is  $2.055 \text{ mW}/\text{cm}^2$ .

The proposed WLOS-DT facility, channel 13, will operate with a maximum ERP of 29.8 kW from a horizontally polarized directional transmitting antenna with a centerline height of 93 meters above ground level (AGL). Considering a conservative vertical plane relative field factor of 0.2 at all relevant locations, the WLOS-DT facility produces a predicted power density at two meters above ground level of  $0.00481 \text{ mW}/\text{cm}^2$ , which is 2.40% of the FCC guideline value for “uncontrolled” environments, and 0.480% of the FCC guideline value for “controlled” environments, making it a minor contributor to radiofrequency radiation at the site, thus excluded from environmental processing under the FCC’s Maximum Permitted Exposure guidelines.

### **OCCUPATIONAL SAFETY**

The permittee of WLOS-DT is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WLOS-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 WLOS-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, 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: March 11, 2008**

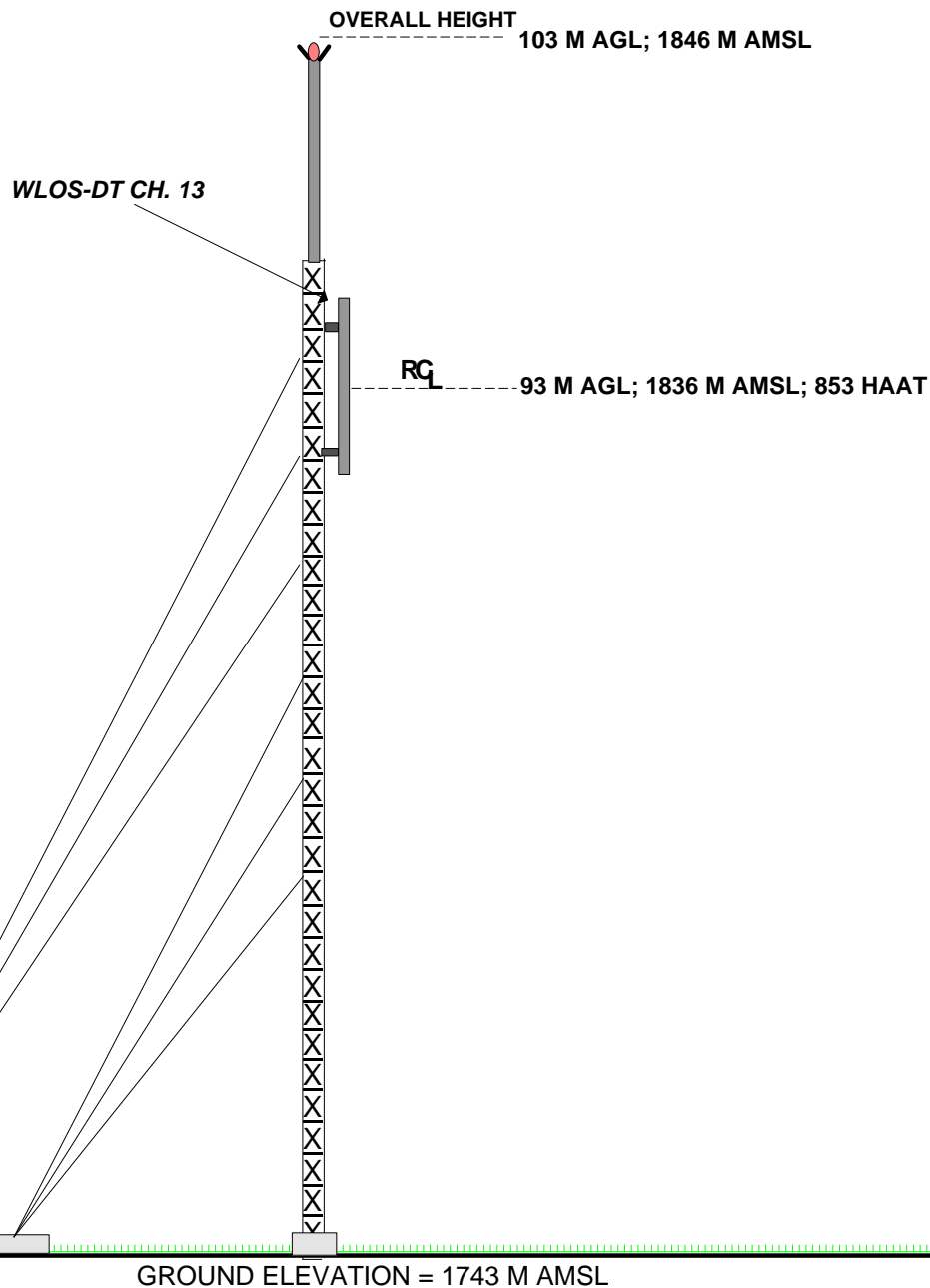


John E. Hidle, Jr.



35° 25' 32" NL  
082° 45' 25" WL

EXHIBIT 1



## VERTICAL PLAN ANTENNA SKETCH

WLOS-DT, ASHEVILLE, NORTH CAROLINA

CH. 13, 29.8 kW - 853 m HAAT

MARCH, 2008

**CARL T. JONES**  
CORPORATION

NOTE: NOT DRAWN TO SCALE



Exhibit No.

2

Date

09 Aug 2005

Call Letters

WLOS-DT

Channel

13

Location

Asheville, NC

Customer

WLOS Licensee, LLC

Antenna Type

THB-C3-6/18-1

**AZIMUTH PATTERN**

Gain

**1.70 (2.30 dB)**

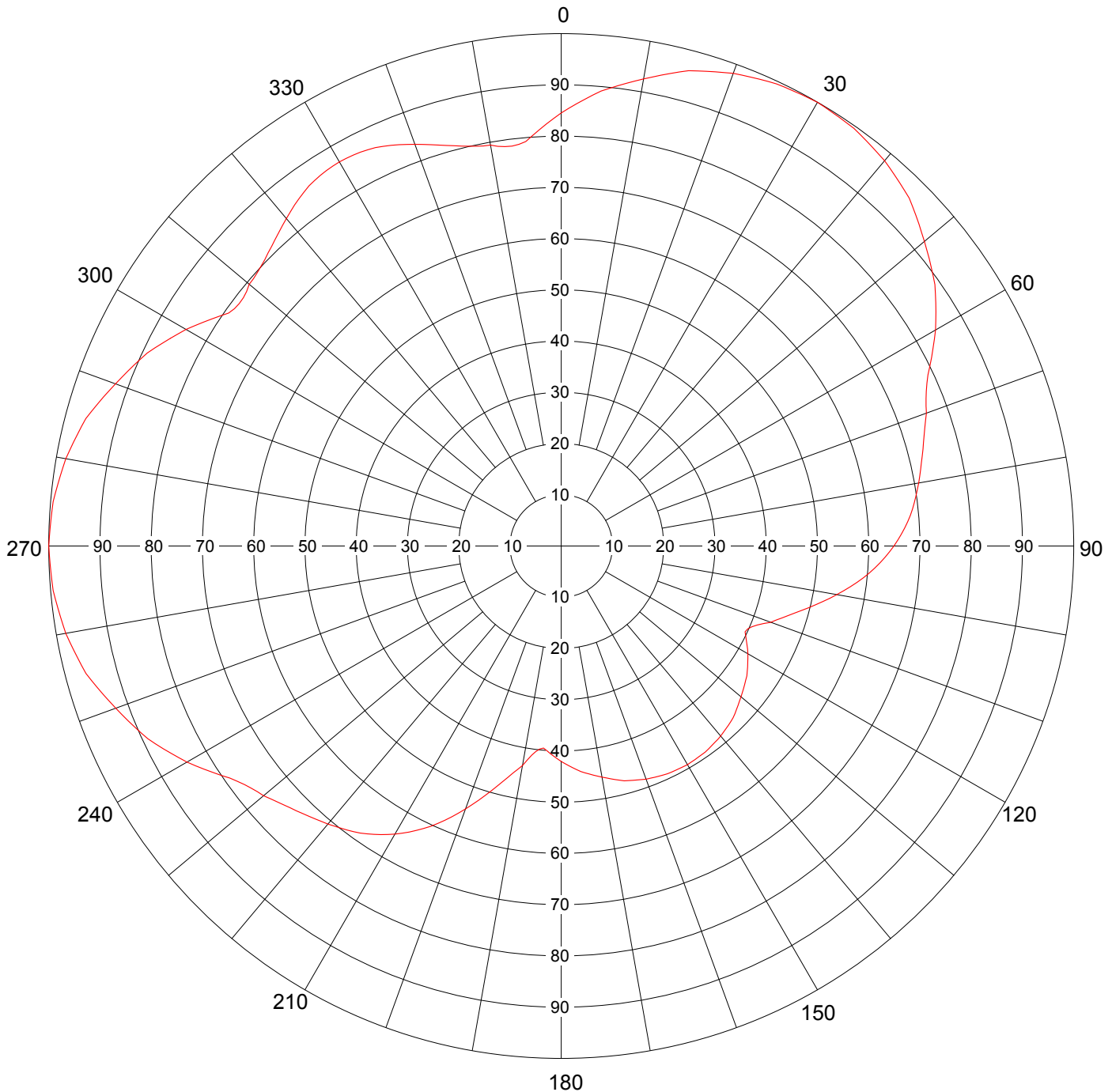
Frequency

**213 MHz**

Calculated / Measured

**Calculated**

Drawing #

**THB-C3**

Remarks:



Date **09 Aug 2005**  
 Call Letters **WLOS-DT** Channel **13**  
 Location **Asheville, NC**  
 Customer **WLOS Licensee, LLC**  
 Antenna Type **THB-C3-6/18-1**

## TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **THB-C3**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.845	45	0.960	90	0.649	135	0.474	180	0.421	225	0.731	270	1.000	315	0.809
1	0.855	46	0.953	91	0.641	136	0.476	181	0.416	226	0.736	271	0.999	316	0.813
2	0.864	47	0.946	92	0.632	137	0.478	182	0.411	227	0.741	272	0.998	317	0.818
3	0.873	48	0.939	93	0.623	138	0.480	183	0.406	228	0.746	273	0.997	318	0.824
4	0.882	49	0.932	94	0.614	139	0.482	184	0.401	229	0.752	274	0.996	319	0.829
5	0.891	50	0.925	95	0.604	140	0.484	185	0.396	230	0.758	275	0.995	320	0.834
6	0.898	51	0.918	96	0.593	141	0.485	186	0.398	231	0.762	276	0.992	321	0.840
7	0.905	52	0.911	97	0.582	142	0.487	187	0.404	232	0.768	277	0.990	322	0.845
8	0.912	53	0.904	98	0.570	143	0.488	188	0.412	233	0.774	278	0.987	323	0.850
9	0.919	54	0.897	99	0.558	144	0.489	189	0.422	234	0.781	279	0.984	324	0.854
10	0.926	55	0.890	100	0.546	145	0.491	190	0.435	235	0.790	280	0.982	325	0.858
11	0.933	56	0.881	101	0.534	146	0.491	191	0.444	236	0.800	281	0.977	326	0.861
12	0.940	57	0.871	102	0.522	147	0.491	192	0.453	237	0.811	282	0.973	327	0.863
13	0.946	58	0.862	103	0.510	148	0.492	193	0.464	238	0.822	283	0.969	328	0.864
14	0.953	59	0.853	104	0.498	149	0.492	194	0.474	239	0.833	284	0.965	329	0.865
15	0.960	60	0.843	105	0.486	150	0.493	195	0.486	240	0.843	285	0.960	330	0.866
16	0.965	61	0.833	106	0.474	151	0.492	196	0.498	241	0.853	286	0.953	331	0.865
17	0.969	62	0.822	107	0.464	152	0.492	197	0.510	242	0.862	287	0.946	332	0.864
18	0.973	63	0.811	108	0.453	153	0.491	198	0.522	243	0.871	288	0.940	333	0.863
19	0.977	64	0.800	109	0.444	154	0.491	199	0.534	244	0.881	289	0.933	334	0.861
20	0.982	65	0.790	110	0.435	155	0.491	200	0.546	245	0.890	290	0.926	335	0.858
21	0.984	66	0.781	111	0.422	156	0.489	201	0.558	246	0.897	291	0.919	336	0.854
22	0.987	67	0.774	112	0.412	157	0.488	202	0.570	247	0.904	292	0.912	337	0.850
23	0.990	68	0.768	113	0.404	158	0.487	203	0.582	248	0.911	293	0.905	338	0.845
24	0.992	69	0.762	114	0.398	159	0.485	204	0.593	249	0.918	294	0.898	339	0.840
25	0.995	70	0.758	115	0.396	160	0.484	205	0.604	250	0.925	295	0.891	340	0.834
26	0.996	71	0.752	116	0.401	161	0.482	206	0.614	251	0.932	296	0.882	341	0.829
27	0.997	72	0.746	117	0.406	162	0.480	207	0.623	252	0.939	297	0.873	342	0.824
28	0.998	73	0.741	118	0.411	163	0.478	208	0.632	253	0.946	298	0.864	343	0.818
29	0.999	74	0.736	119	0.416	164	0.476	209	0.641	254	0.953	299	0.855	344	0.813
30	1.000	75	0.731	120	0.421	165	0.474	210	0.649	255	0.960	300	0.845	345	0.809
31	0.999	76	0.726	121	0.425	166	0.471	211	0.657	256	0.965	301	0.835	346	0.804
32	0.998	77	0.721	122	0.429	167	0.468	212	0.664	257	0.969	302	0.824	347	0.801
33	0.997	78	0.717	123	0.433	168	0.464	213	0.671	258	0.973	303	0.814	348	0.798
34	0.996	79	0.712	124	0.438	169	0.461	214	0.678	259	0.977	304	0.803	349	0.796
35	0.995	80	0.708	125	0.442	170	0.458	215	0.684	260	0.982	305	0.792	350	0.795
36	0.992	81	0.704	126	0.445	171	0.455	216	0.689	261	0.984	306	0.788	351	0.790
37	0.990	82	0.699	127	0.448	172	0.452	217	0.694	262	0.987	307	0.786	352	0.787
38	0.987	83	0.694	128	0.452	173	0.448	218	0.699	263	0.990	308	0.787	353	0.786
39	0.984	84	0.689	129	0.455	174	0.445	219	0.704	264	0.992	309	0.790	354	0.788
40	0.982	85	0.684	130	0.458	175	0.442	220	0.708	265	0.995	310	0.795	355	0.792
41	0.977	86	0.678	131	0.461	176	0.438	221	0.712	266	0.996	311	0.796	356	0.803
42	0.973	87	0.671	132	0.464	177	0.433	222	0.717	267	0.997	312	0.798	357	0.814
43	0.969	88	0.664	133	0.468	178	0.429	223	0.721	268	0.998	313	0.801	358	0.824
44	0.965	89	0.657	134	0.471	179	0.425	224	0.726	269	0.999	314	0.804	359	0.835

Remarks:



Exhibit No.

4

Date

09 Aug 2005

Call Letters

WLOS-DT

Channel

13

Location

Asheville, NC

Customer

WLOS Licensee, LLC

Antenna Type

THB-C3-6/18-1

**ELEVATION PATTERN**

RMS Gain at Main Lobe

**6.0 (7.78 dB)**

Beam Tilt

**0.60 Degrees**

RMS Gain at Horizontal

**6.0 (7.78 dB)**

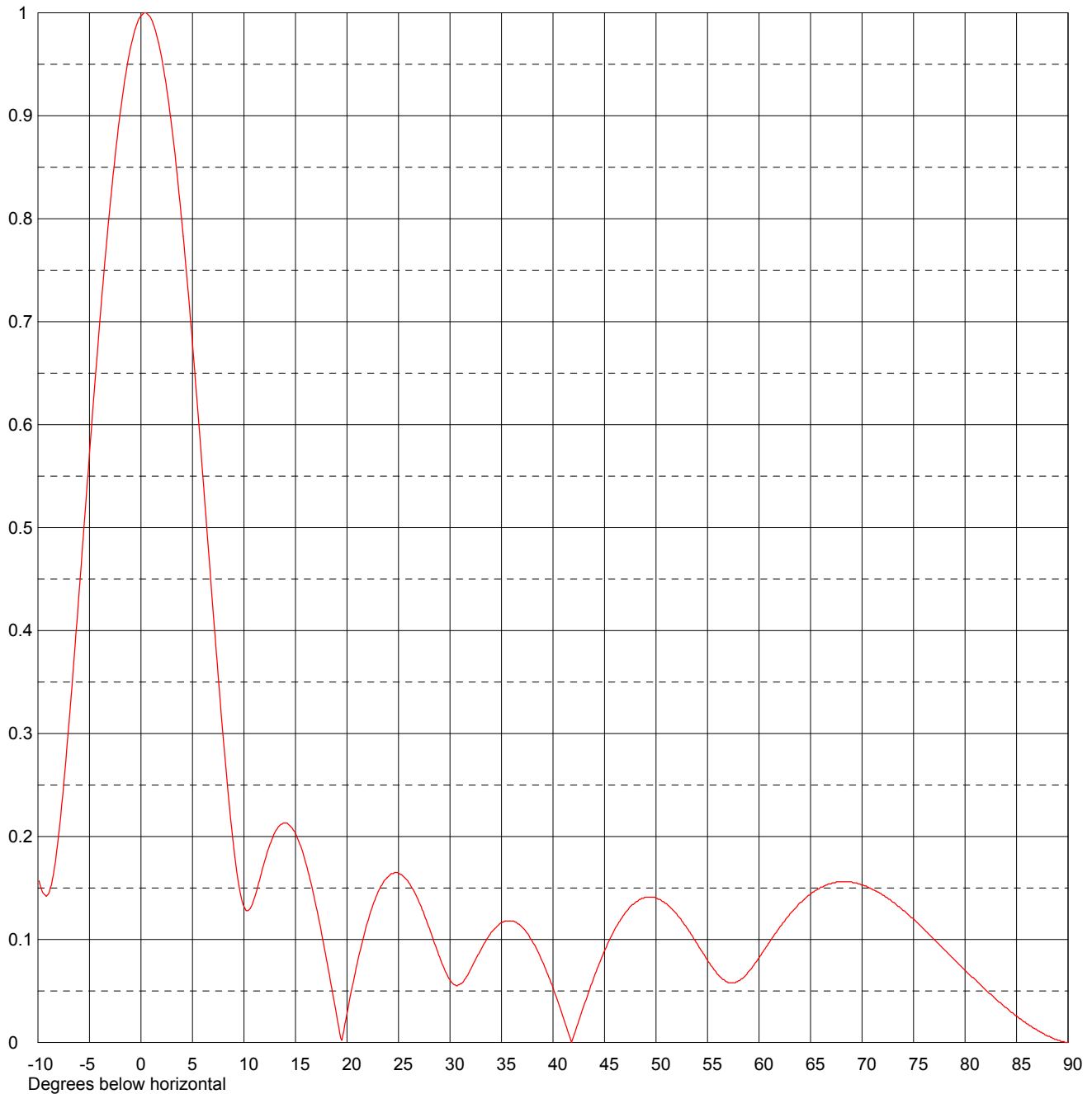
Frequency

**213.00 MHz**

Calculated / Measured

**Calculated**

Drawing #

**06H060060-90**

Remarks:



Exhibit No.

5

Date

09 Aug 2005

Call Letters

WLOS-DT

Channel

13

Location

Asheville, NC

Customer

WLOS Licensee, LLC.

Antenna Type

THB-C3-6/18-1

**ELEVATION PATTERN**

RMS Gain at Main Lobe

**6.0 (7.78 dB)**

Beam Tilt

**0.60 Degrees**

RMS Gain at Horizontal

**6.0 (7.78 dB)**

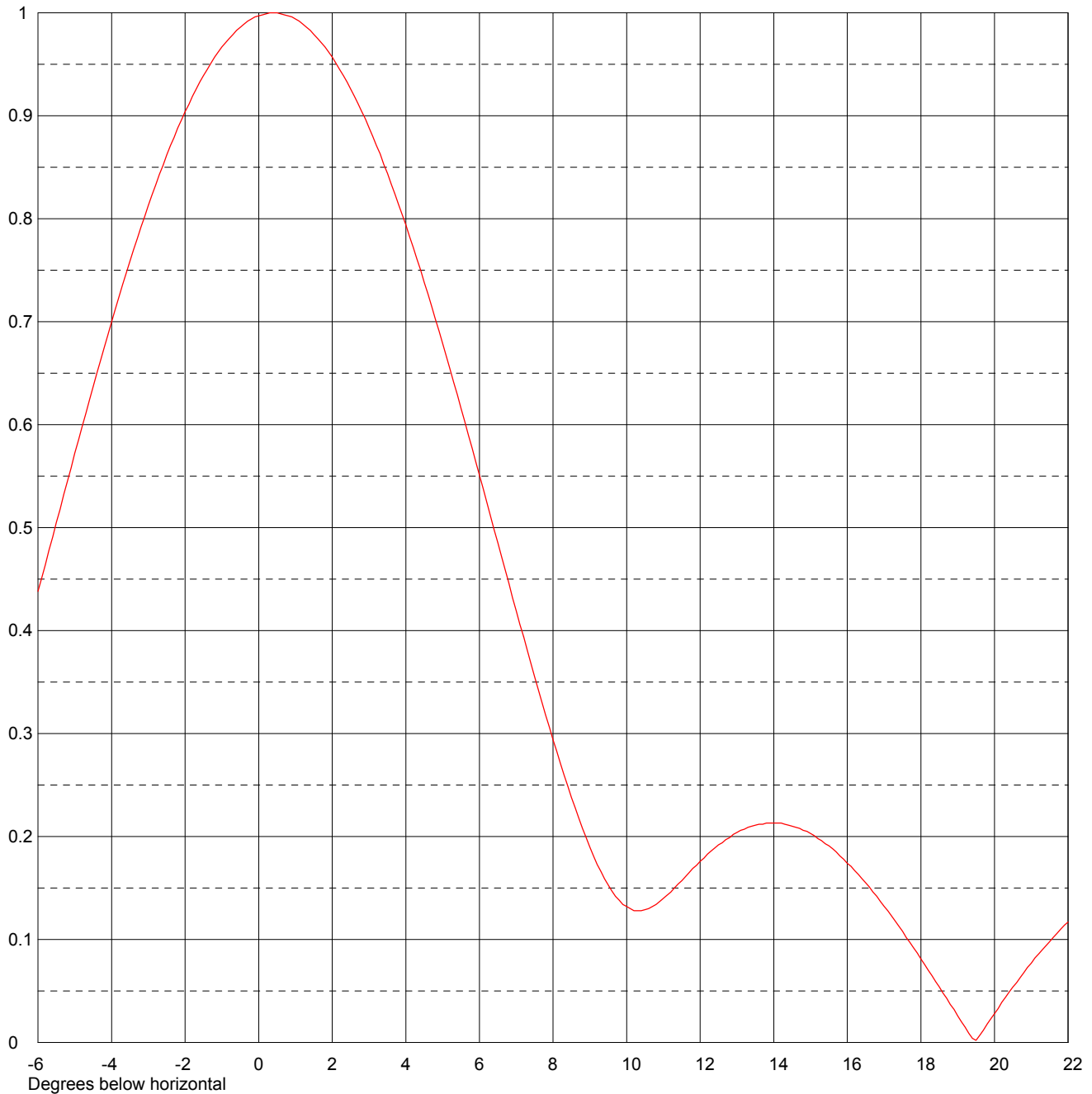
Frequency

**213.00 MHz**

Calculated / Measured

**Calculated**

Drawing #

**06H060060**

Remarks:



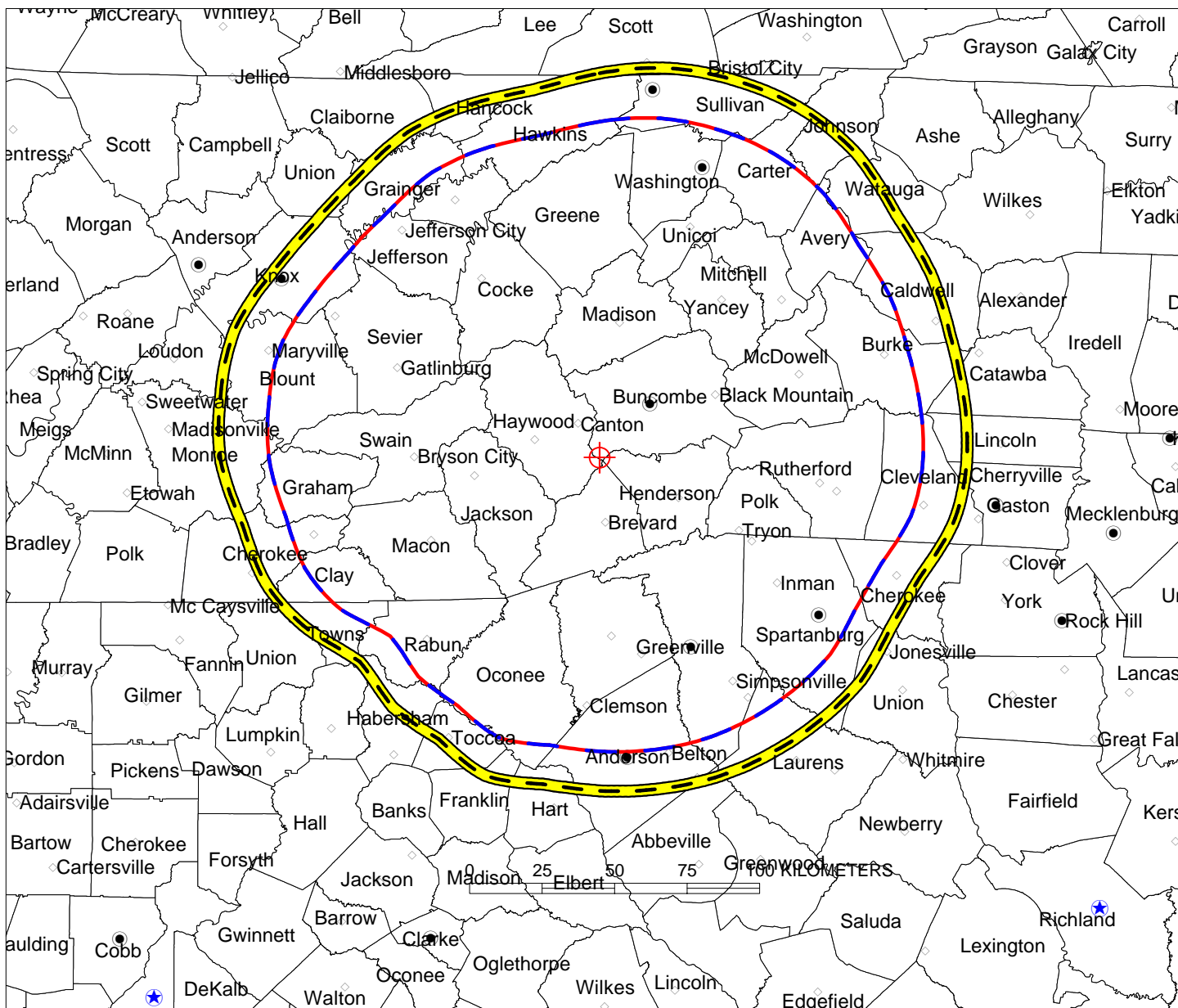
Date	<b>09 Aug 2005</b>
Call Letters	<b>WLOS-DT</b> Channel <b>13</b>
Location	<b>Asheville, NC</b>
Customer	<b>WLOS Licensee, LLC.</b>
Antenna Type	<b>THB-C3-6/18-1</b>

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **06H060060**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.161	2.4	0.933	10.6	0.130	30.5	0.056	51.0	0.135	71.5	0.146
-9.5	0.145	2.6	0.919	10.8	0.134	31.0	0.057	51.5	0.130	72.0	0.143
-9.0	0.144	2.8	0.904	11.0	0.140	31.5	0.062	52.0	0.125	72.5	0.140
-8.5	0.163	3.0	0.888	11.5	0.157	32.0	0.071	52.5	0.118	73.0	0.136
-8.0	0.201	3.2	0.871	12.0	0.176	32.5	0.081	53.0	0.111	73.5	0.132
-7.5	0.251	3.4	0.853	12.5	0.192	33.0	0.090	53.5	0.104	74.0	0.128
-7.0	0.309	3.6	0.834	13.0	0.204	33.5	0.099	54.0	0.096	74.5	0.124
-6.5	0.372	3.8	0.814	13.5	0.211	34.0	0.107	54.5	0.088	75.0	0.120
-6.0	0.438	4.0	0.794	14.0	0.213	34.5	0.112	55.0	0.080	75.5	0.115
-5.5	0.505	4.2	0.772	14.5	0.210	35.0	0.116	55.5	0.073	76.0	0.110
-5.0	0.572	4.4	0.750	15.0	0.203	35.5	0.118	56.0	0.066	76.5	0.105
-4.5	0.637	4.6	0.727	15.5	0.191	36.0	0.118	56.5	0.061	77.0	0.100
-4.0	0.700	4.8	0.703	16.0	0.174	36.5	0.116	57.0	0.058	77.5	0.095
-3.5	0.759	5.0	0.679	16.5	0.155	37.0	0.112	57.5	0.058	78.0	0.090
-3.0	0.813	5.2	0.654	17.0	0.132	37.5	0.106	58.0	0.060	78.5	0.085
-2.8	0.833	5.4	0.629	17.5	0.108	38.0	0.098	58.5	0.063	79.0	0.080
-2.6	0.852	5.6	0.603	18.0	0.081	38.5	0.089	59.0	0.069	79.5	0.075
-2.4	0.871	5.8	0.577	18.5	0.054	39.0	0.078	59.5	0.075	80.0	0.070
-2.2	0.888	6.0	0.551	19.0	0.026	39.5	0.066	60.0	0.082	80.5	0.065
-2.0	0.904	6.2	0.525	19.5	0.002	40.0	0.053	60.5	0.090	81.0	0.061
-1.8	0.919	6.4	0.498	20.0	0.028	40.5	0.039	61.0	0.097	81.5	0.056
-1.6	0.933	6.6	0.472	20.5	0.054	41.0	0.024	61.5	0.105	82.0	0.051
-1.4	0.945	6.8	0.446	21.0	0.077	41.5	0.009	62.0	0.112	82.5	0.047
-1.2	0.957	7.0	0.419	21.5	0.098	42.0	0.006	62.5	0.118	83.0	0.042
-1.0	0.967	7.2	0.394	22.0	0.117	42.5	0.021	63.0	0.125	83.5	0.038
-0.8	0.975	7.4	0.368	22.5	0.133	43.0	0.036	63.5	0.130	84.0	0.034
-0.6	0.983	7.6	0.343	23.0	0.146	43.5	0.050	64.0	0.136	84.5	0.029
-0.4	0.989	7.8	0.318	23.5	0.155	44.0	0.064	64.5	0.140	85.0	0.026
-0.2	0.994	8.0	0.294	24.0	0.161	44.5	0.077	65.0	0.144	85.5	0.022
0.0	0.997	8.2	0.271	24.5	0.164	45.0	0.089	65.5	0.148	86.0	0.018
0.2	0.999	8.4	0.249	25.0	0.164	45.5	0.100	66.0	0.151	86.5	0.015
0.4	1.000	8.6	0.228	25.5	0.161	46.0	0.110	66.5	0.153	87.0	0.012
0.6	0.999	8.8	0.208	26.0	0.155	46.5	0.118	67.0	0.154	87.5	0.009
0.8	0.997	9.0	0.190	26.5	0.147	47.0	0.126	67.5	0.156	88.0	0.006
1.0	0.994	9.2	0.173	27.0	0.136	47.5	0.132	68.0	0.156	88.5	0.004
1.2	0.989	9.4	0.159	27.5	0.124	48.0	0.136	68.5	0.156	89.0	0.002
1.4	0.983	9.6	0.147	28.0	0.111	48.5	0.139	69.0	0.156	89.5	0.001
1.6	0.975	9.8	0.138	28.5	0.096	49.0	0.141	69.5	0.155	90.0	0.000
1.8	0.967	10.0	0.132	29.0	0.083	49.5	0.141	70.0	0.153		
2.0	0.957	10.2	0.128	29.5	0.070	50.0	0.140	70.5	0.151		
2.2	0.945	10.4	0.128	30.0	0.061	50.5	0.138	71.0	0.149		

Remarks:



**WLOS-DT Channel 13, DTV Proposed Facility**  
**Protected Coverage Contour**  
 29.8 kW ERP, 853 m HAAT, 36 dBu, F(50,90)  
 Directional Antenna; Dielectric THB-C3-6/18-1

**WLOS-DT Channel 13, DTV Proposed Facility**  
**Community Coverage Contour**  
 29.8 kW ERP, 853 m HAAT, 43 dBu, F(50,90)  
 Directional Antenna; Dielectric THB-C3-6/18-1

**WLOS-DT Channel 13, DTV Table Facility**  
**Protected Coverage Contour**  
 29.8 kW ERP, 853 m HAAT, 36 dBu, F(50,90)  
 Directional Antenna; Dielectric THB-C3-6/18-1

**WLOS-DT Channel 13, DTV Table Facility**  
**Community Coverage Contour**  
 29.8 kW ERP, 853 m HAAT, 43 dBu, F(50,90)  
 Directional Antenna; Dielectric THB-C3-6/18-1

## PREDICTED COVERAGE CONTOURS

**WLOS-DT, ST. ASHEVILLE, NORTH CAROLINA**  
**COMMUNITY COVERAGE CONTOUR**  
**OF DTV TABLE OF ALLOTMENTS FACILITY**  
**VS. PROPOSED CHECKLIST FACILITY**  
**MARCH, 2008**

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

**SUMMARY OF RADIOFREQUENCY  
RADIATION STUDY**  
WLOS-DT, ASHEVILLE, NORTH CAROLINA  
CHANNEL 13, 29.8 kW ERP, 853 m HAAT  
MARCH, 2008

<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>
WLOS-DT	DT	13	213	H	91	29.800	0.200	0.00481	0.200	2.40%

**TOTAL PERCENTAGE OF ANSI VALUE= 2.40%**

*\*\* 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.*

*\*\*\*Includes the proposed station and all stations within 315 meters.*