

Exhibit 11 - Statement A  
**NATURE OF THE PROPOSAL**  
**ALLOCATION CONSIDERATIONS**  
**INTERFERENCE ANALYSIS**

prepared for  
**Guenter Marksteiner**  
WHDN-LD Boston, Massachusetts  
Facility ID 59488  
Ch. 38 15 kW

*Guenter Marksteiner* (“*Marksteiner*”) is the Licensee of WHDN-LD, digital LPTV Channel 26, Boston, Massachusetts (file number BLTTL-20031231AAX). The instant application herein seeks a minor modification of the License as a displacement to specify a different operating frequency, and a different antenna system. Considering the current state of the DTV transition, *Marksteiner* requests processing of the instant application under Post-Transition conditions. As necessary, waivers of the contingency rules are hereby requested.

The instant application qualifies as a “displacement” application per §73.3572(a)(4)(iv)(A) of the Commission’s Rules due to its co-channel proximity to WHPX(TV) (DTV Ch. 26, New London, CT, 141 km distant) and WTEN(TV) (DTV Ch. 26, Albany, NY, 244.4 km distant). These co-channel facilities are well within the qualifying 265 km spacing specified in §73.3572(a)(4)(iv)(A) of the Rules for a displaced Low Power UHF facility.

The instant proposal specifies operation on Channel 38 with a maximum ERP of 15 kW and a “stringent” out of channel emission mask. The proposed antenna system for WHDN-LD is a directional antenna (MIG model 3-DIE-WHDN-CUSTOM) which will be mounted above the rooftop of “*One Boston Place*,” a tall building located in downtown Boston. According to the applicant, the existing rooftop is 183.5 meters above ground level, and the overall height of the transmitting antenna and any associated supporting structure will extend to a height of 4.6 meters above the top of the building. Since this antenna structure height does not exceed 6.1 meters, the structure does not require notification to the FAA under §17.14(b) of the Commission’s Rules, and Antenna Structure Registration is not believed to be necessary.

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As demonstrated in **Exhibit 11 – Figure 1**, the 51 dBμ service contour of the proposed facility overlaps a portion of the authorized facility. Thus, the contour overlap with the authorized facility clearly demonstrates compliance with the minor change criteria of §73.3572.

The proposed transmitting antenna, an MIG model 3-DIE-WHDN-CUSTOM is directional in the horizontal plane. This antenna will employ 0.6 degrees of electrical beam tilt. The maximum ERP will be 15 kilowatts, horizontally polarized. The antenna system will be installed in accordance with the manufacturer's instructions. A competent technical representative of the applicant will supervise said installation on-site. The antenna's horizontal plane pattern, expressed in terms of relative field and power, is supplied as **Exhibit 11 - Figure 2** and **Exhibit 11 - Table I**, properly oriented relative to True North, in graphical and tabular form (respectively). **Exhibit 11 - Figure 3** presents the theoretical vertical plane (elevation) pattern for the antenna system.

### **Allocation Considerations**

The instant proposal complies with the Commission's interference protection requirements toward all Post-Transition digital television, low power television, television translator, and Class A television facilities. A detailed interference study was conducted in accordance with the terrain dependent Longley-Rice point-to-point propagation model, per the Commission's Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, July 2, 1997 ("OET-69")<sup>1</sup>. The interference study examined the change in interference as experienced by nearby pertinent stations that would result from the proposed facility.

The results, summarized in **Exhibit 11 - Table II**, indicate that the instant proposal causes no undesirable interference as defined in §§74.793(e) through (h) to full power facilities, Class A stations, or to secondary stations. Accordingly, the instant proposal complies with §74.793 regarding

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<sup>1</sup> The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A cell size of 1 km was employed. Comparisons of various results of this computer program (run on a Sun processor) to the Commission's implementation of OET-69 show excellent correlation.

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interference protection to Post-Transition digital television, low power television, television translator, and Class A television facilities.

**International Considerations**

The proposed transmitter site is located 297.8 km from the U.S.-Canadian border, which is greater than the 100 km required coordination distance specified for digital low power television stations in the 2000 Canadian Letter of Understanding.<sup>2</sup> As demonstrated in **Exhibit 11 – Figure 4**, the worst-case interfering contour of 6.1 dBμ F(50,10)<sup>3</sup> does not reach the Canadian border. Thus, it is believed that international coordination will not be necessary for this instant proposal.

**Other Allocation Considerations**

The nearest FCC monitoring station is at Belfast, Maine, at a distance of 281.7 km from the proposed site. This exceeds by a great margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The proposed site is also located outside the area specified in §73.1030(a)(1). Thus, notification of the instant proposal to the National Radio Astronomy Observatory at Green Bank, West Virginia, is not required.

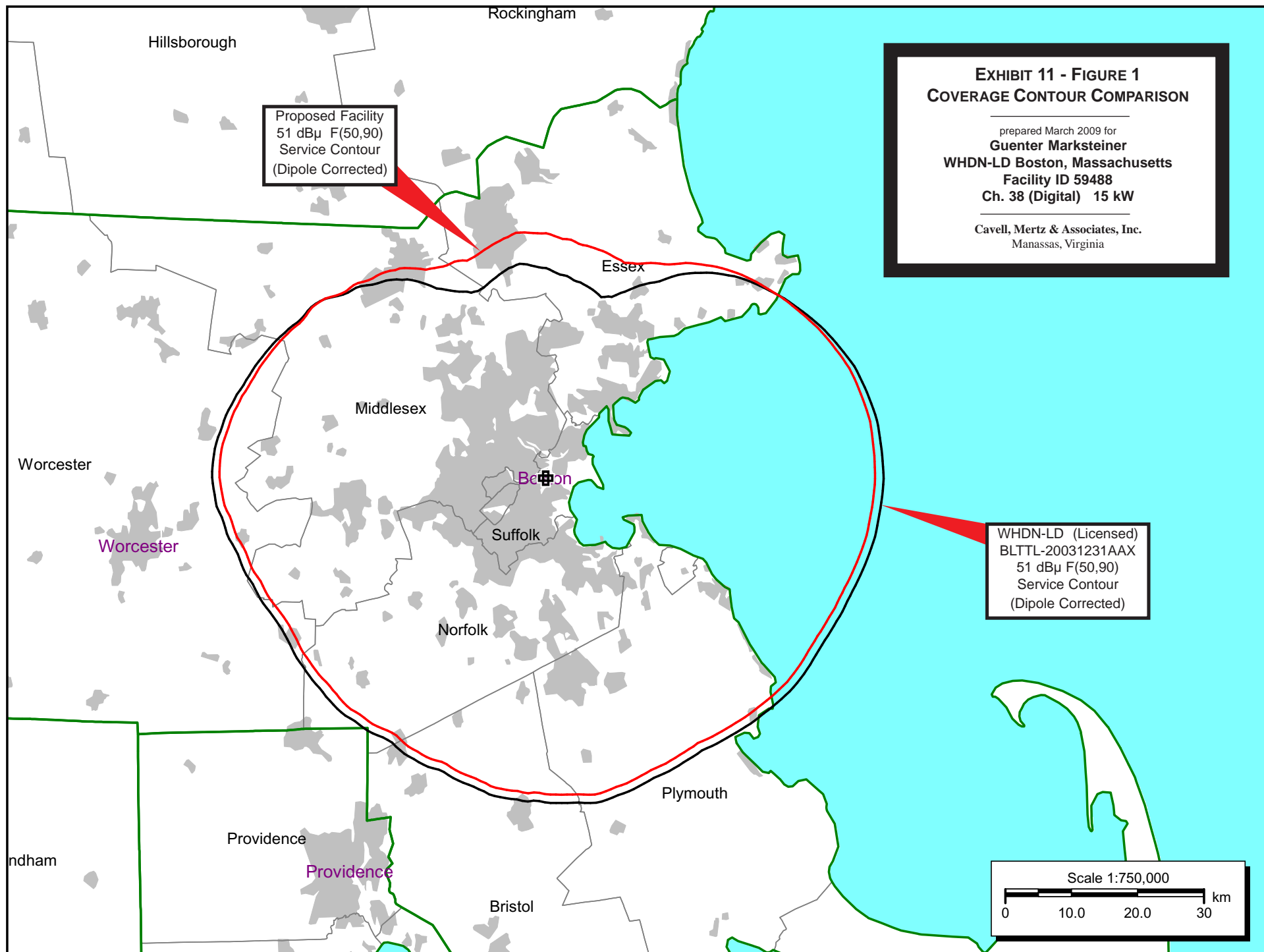
There are no AM broadcast stations located within 3.2 km (2 miles) of the WHDN-LD site, according to information extracted from the Commission's engineering database.

Thus, this proposal is believed to be in compliance with the current Commission's Rules and policies with respect to allocation matters.

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<sup>2</sup> The Letter of Understanding Between the Federal Communications Commission of the United States of America and Industry Canada Related to the Use of the 54-72 MHz, 76-88 MHz, 174-216 MHz and 470-806 MHz Bands for the Digital Television Broadcasting Service Along the Common Border, September 29, 2000, paragraph 12.

<sup>3</sup> Ibid., Appendix 2. The worst-case interfering contour for digital facilities is the co-channel DTV into NTSC interference, defined as 33.8 dB below the 47 dBμ protected contour using the F(10,10) contour. 7.1 dBμ is then subtracted from 13.2 dBμ F(10,10) to obtain the equivalent 6.1 dBμ F(50,10) worst-case interfering contour.



**EXHIBIT 11 - FIGURE 1**  
**COVERAGE CONTOUR COMPARISON**

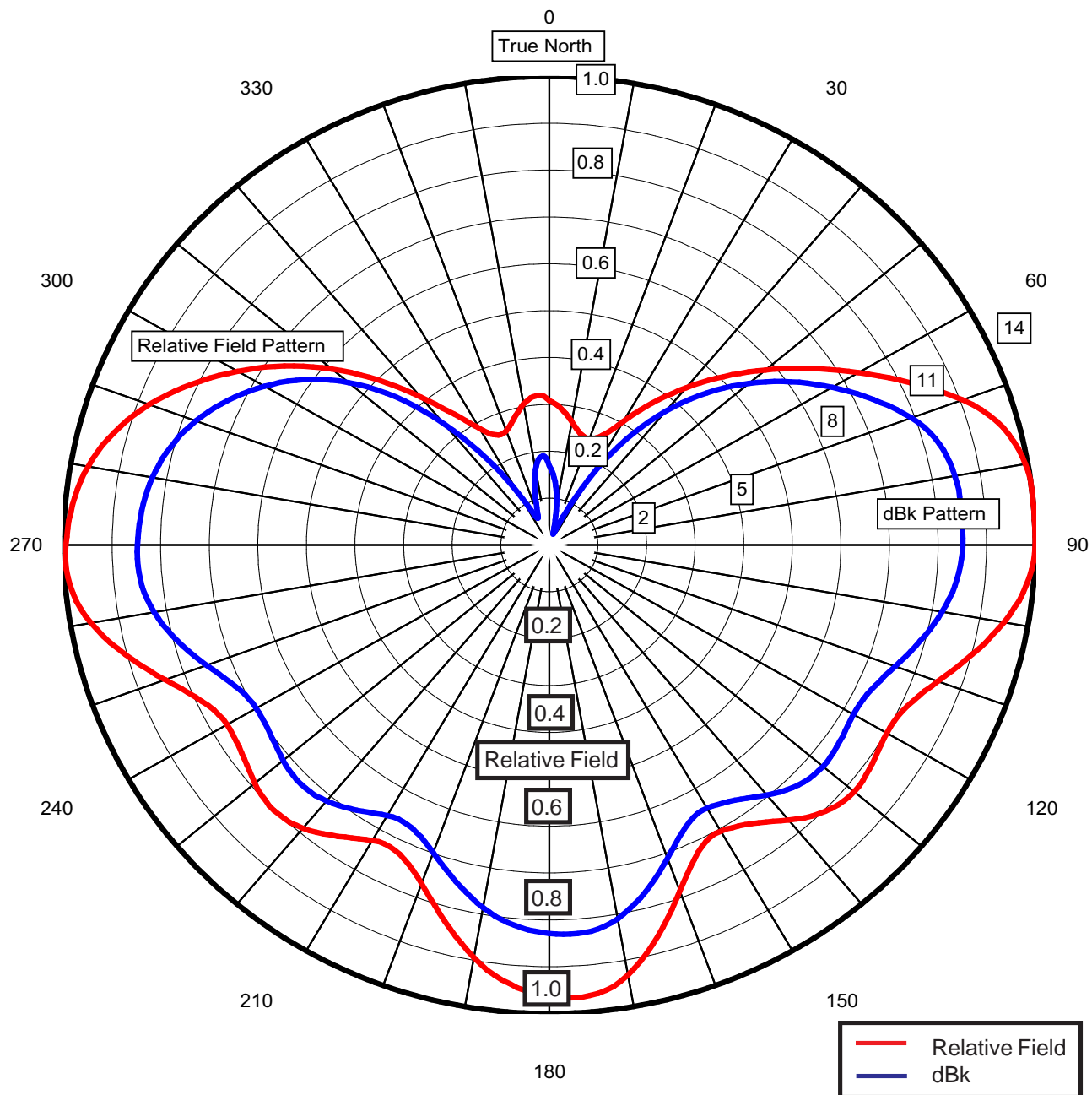
prepared March 2009 for  
**Guenter Marksteiner**  
**WHDN-LD Boston, Massachusetts**  
**Facility ID 59488**  
**Ch. 38 (Digital) 15 kW**

Cavell, Mertz & Associates, Inc.  
Manassas, Virginia

Proposed Facility  
51 dBμ F(50,90)  
Service Contour  
(Dipole Corrected)

WHDN-LD (Licensed)  
BLTTL-20031231AAX  
51 dBμ F(50,90)  
Service Contour  
(Dipole Corrected)

Scale 1:750,000  
0 10.0 20.0 30 km



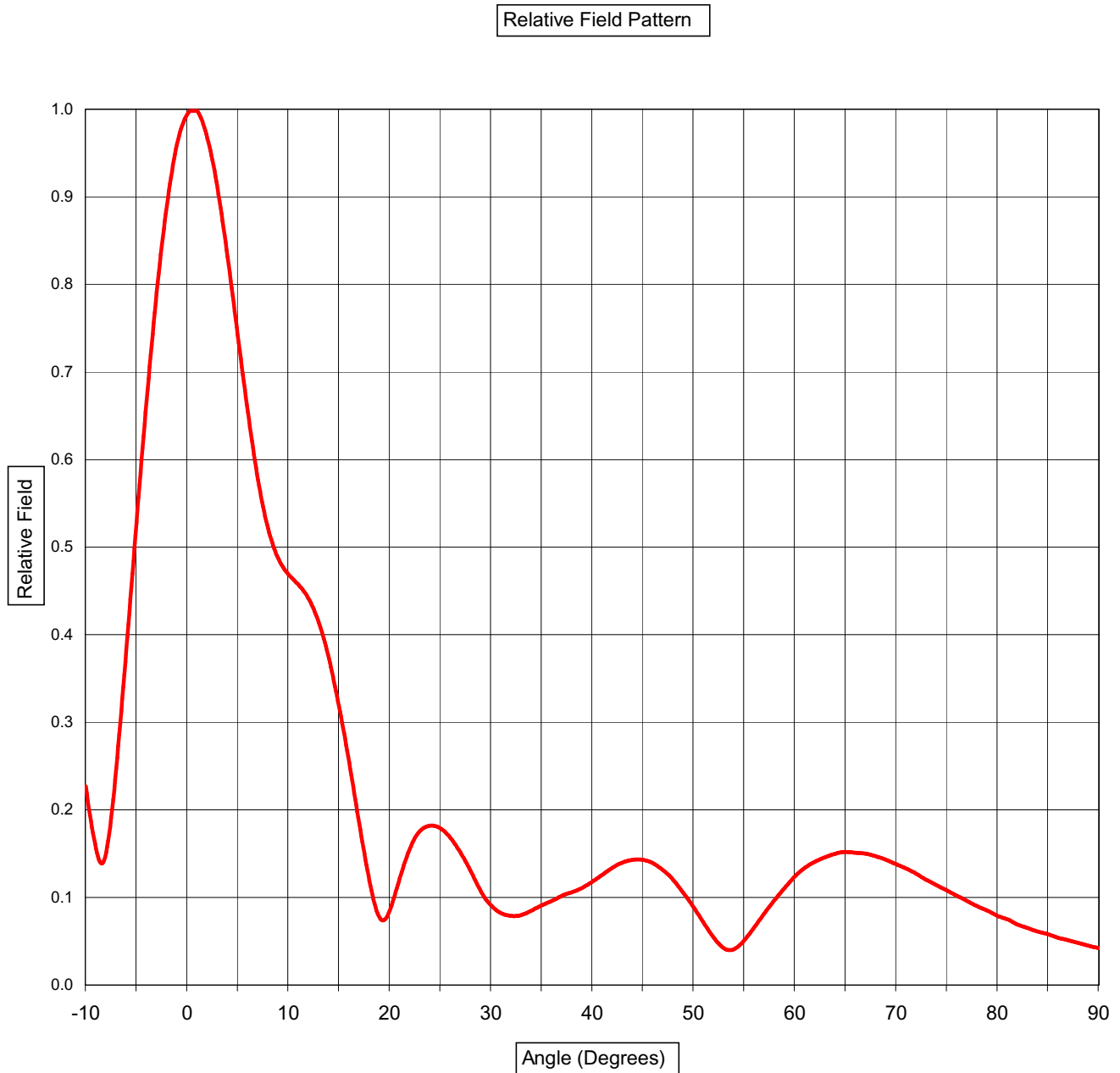
**EXHIBIT 11 - FIGURE 2**  
**ANTENNA HORIZONTAL PLANE RADIATION PATTERN**

prepared March 2009 for  
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Exhibit 11 - Table I  
**HORIZONTAL PLANE RADIATION PATTERN DATA**  
 prepared for  
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<u>Azimuth</u> <u>(Degrees True)</u>	<u>Relative</u> <u>Field</u>	<u>Power</u> <u>(dBk)</u>	<u>Power</u> <u>(kW)</u>	<u>Relative</u> <u>dB</u>
0	0.308	1.53	1.42	-10.23
10	0.267	0.29	1.07	-11.47
20	0.241	-0.60	0.87	-12.36
30	0.304	1.42	1.39	-10.34
40	0.438	11.76	15.00	0.00
50	0.581	7.04	5.06	-4.72
60	0.735	9.09	8.10	-2.67
70	0.905	10.89	12.29	-0.87
80	0.995	11.72	14.85	-0.04
90	1.000	11.76	15.00	0.00
100	0.950	11.32	13.54	-0.45
110	0.851	10.36	10.86	-1.40
120	0.802	9.84	9.65	-1.92
130	0.819	10.03	10.06	-1.73
140	0.766	9.45	8.80	-2.32
150	0.705	8.72	7.46	-3.04
160	0.786	9.67	9.27	-2.09
170	0.932	11.15	13.03	-0.61
180	0.963	11.43	13.91	-0.33
190	0.894	10.79	11.99	-0.97
200	0.769	9.48	8.87	-2.28
210	0.728	9.00	7.95	-2.76
220	0.789	9.70	9.34	-2.06
230	0.791	9.72	9.39	-2.04
240	0.766	9.45	8.80	-2.32
250	0.841	10.26	10.61	-1.50
260	0.958	11.39	13.77	-0.37
270	0.995	11.72	14.85	-0.04
280	0.964	11.44	13.94	-0.32
290	0.876	10.61	11.51	-1.15
300	0.741	9.16	8.24	-2.60
310	0.584	7.09	5.12	-4.67
320	0.412	4.06	2.55	-7.70
330	0.287	0.92	1.24	-10.84
340	0.259	0.03	1.01	-11.73
350	0.305	1.45	1.40	-10.31



**EXHIBIT 11 - FIGURE 3**  
**VERTICAL PLANE (ELEVATION) RADIATION PATTERN**

prepared March 2009 for  
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Manassas, Virginia

Exhibit 11 - Table II  
**INTERFERENCE ANALYSIS RESULTS SUMMARY**

prepared for  
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						----Population (2000 Census)----	
<u>Ch.</u>	<u>Call</u>	<u>City/State</u>	<u>Dist(km)</u>	<u>Status</u>	<u>File Number</u>	<u>Baseline</u>	<u>New Interference</u>
38	WHCT-LP	HARTFORD CT	156.4	LIC	BLTTL-20050822AAP	---	none
38	W38DL	ADAMS MA	175.6	CP	BDFCDTT-20080619AFG	165,039	0 / 0.00%
38	W38DL	ADAMS, ETC. MA	175.6	LIC	BLTT-20030807ACU	---	none
38	WGME-TV	PORTLAND ME	180.0	LIC	BLCDDT-20061206ACS	1,164,966	5,736 / 0.49%
38	W38CB	LITTLETON NH	206.5	LIC	BLTT-19950725II	---	none
38	WWOR-TV	SECAUCUS NJ	302.1	APP	BMPCDDT-20080620AHC	---	none
38	WWOR-TV	SECAUCUS NJ	302.1	CP MOD	BMPCDDT-20040130AZR	---	none
38	WPXU-LP	AMITYVILLE NY	278.7	LIC	BLTTL-19960422KA	---	none
38	WCFE-TV	PLATTSBURGH NY	345.3	APP	BPEDT-20080617ABV	---	none
38	WCFE-TV	PLATTSBURGH NY	345.3	LIC	BLEDT-20050920ABC	---	none
38	WCFE-TV	PLATTSBURGH NY	345.3	CP	BPEDT-20080130AJH	---	none
38	WNGN-LP	TROY NY	215.6	LIC	BLTTL-20070904ABG	---	none
38	WNGN-LP	TROY NY	215.6	APP	BSTA-20080912ABA	---	none
39	WCTX	NEW HAVEN CT	188.0	LIC	BLCDDT-20040507AAZ	---	none
39	WSBK-TV	BOSTON MA	15.6	LIC	BLCDDT-20021009AAF	6,600,862	1,420 / 0.02%
39	W39AR	CONCORD NH	102.2	LIC	BLTTL-19890424IB	---	none
40	W40BO	BOSTON MA	14.7	LIC	BLTT-20001206ABN	---	none
45	WSHM-LP	SPRINGFIELD MA	131.3	APP	BPTT-20031006ABT	---	none



**EXHIBIT 11 - FIGURE 4**  
**INTERNATIONAL ALLOCATION CONSIDERATIONS**

prepared March 2009 for  
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**Ch. 38 (Digital) 15 kW**

Cavell, Mertz & Associates, Inc.  
Manassas, Virginia

Proposed Facility  
Worst-Case  
Interfering Contour  
6.1 dB $\mu$  F(50,10)

Scale 1:5,000,000

0 70.0 140.0 210 km

