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CLARENCE M. BEVERAGE

LAURA M. MIZRAHI

CONSULTANT

JAMES W. POLLOCK, P.E.

~ VIA E-MAIL ~

September 7, 2012

Mr. Felix Melendez
Director of Operations Citywide Radio and FCC Licensing Support,
Wireless Technologies
New York City Department of Information Technology & Telecommunications
15 Metrotech Center, 18th Floor
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Steven Harte
The City of New York, DoITT, Associate Commissioner
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Brooklyn, NY 11201
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sharte@doitt.nyc.gov

**RE: WTSD LPTV DTV CH 16 Philadelphia, Pennsylvania
CH 16 T-Band PLMR Operations**

Dear Mr. Melendez & Mr. Harte:

I am writing to you on behalf of Local Media TV Philadelphia, LLC ("LMTV") licensee of WTSD-CA CH 16 in Philadelphia. Our firm has been retained by LMTV to assist them in evaluating the interference received by the City of New York's CH 16 PLMR facilities from WTSD's operations. We will also work with LMTV to design and implement modified facilities which are designed to fully protect City of New York facilities operating on CH 16. I believe that we all recognize that a proper system design requires both theoretical and measured data as well as a reasonable record of real world signal. We look forward to working with you to obtain a mutually agreeable implementation resulting in mutual beneficial use of CH 16 without negative impact to the City's facilities.

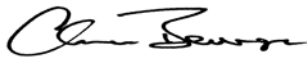
Mr. Felix Melendez
Mr. Steven Harte
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At this time we have completed a technical analysis and developed a practical proposal for significantly reduced operation of the WTSD facility which will allow WTSD to return to the air without negatively impacting existing City use of its CH 16 PLMR facilities. Attached as Exhibit I is our analysis of the CH 16 PLMR site with the greatest potential for received interference. As is readily apparent, WTSD's proposed reduced power operations would cause no interference to this site.

At this time LMTV proposes a reduction in ERP from the authorized 15,000 watts to 22 watts as an interim measure using the existing transmission facilities. Operation with these facilities will allow LMTV to gather field strength measurement data while providing service to its core market. Based on our calculations we believe that the extent of the power reduction will achieve the desired result, which is to prevent WTSD's operations from negatively impacting the City's use of its CH 16 PLMR facilities.

We hope that this introductory letter and proposal are just the beginning step toward resolving this situation in an efficient and practical manner. Would you be so kind as to review this proposal and let us know how best we can move forward.

Sincerely,



Clarence M. Beverage
CMB/lms

fc: LMTV.1lt

EXHIBIT I

WTSD FACILITY ANALYSIS WITH REGARD TO POSSIBLE INTERFERENCE TO PLMR FACILITIES UTILIZING UHF-T CH 16 SPECTRUM SEPTEMBER 6, 2012

The license for the NYC Police Department Todt Hill facility is under call sign WIM487. The necessary emission designators are specified as 11 kHz and 20 kHz analog FM. The allocation channel spacing is 6.25 kHz. The base station transmit frequencies are:

482.6625 MHz 50-180 watts ERP

485.3875 MHz 20-100 watts ERP

The receive frequency is:

485.6625 MHz with 2,500 units authorized.

Note: there are numerous additional licenses for different locations and frequencies but this facility is believed to exhibit the greatest potential sensitivity to incoming interference from WTSD due to the distance and receive antenna elevation above mean sea level.

Horizontal plane and elevation pattern data are in the attached PDF files as supplied by ERI, the antenna manufacturer. The azimuth bearing to Todt Hill is 56.3 degrees, the antenna orientation azimuth is 160 degrees resulting in the azimuth data pertinent to Todt Hill being the 256 degree bearing on the ERI pattern:

H. Pol. Field 0.81 ERP = 9.84 kW

V. Pol. Field 0.478 ERP = 3.42 kW

Since the PLMR receive antenna is vertically polarized the greatest receive power will come from the vertically polarized WTSD signal.

Elevation field at 0.515 degree depression angle for 1.33 k factor = 0.9 use 1.0 for calculations.

Path to Todt Hill 113.84 kilometers 485 Mhz 2.6 dB Fresnel loss 127.3 dB path loss.

At 485.30625 MHz the noise floor was measured at -165 dBm/Hz (Note: noise floor measured at Woodbridge -151.2 dBm/Hz). It is our understanding that the noise floor data was obtained on July 31, 2012 by Jeff DePolo with Herb Dublar, Motorola System Manager, also on site.

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Calculations & Measured data validation:

Assume a 12.5 kHz bandwidth channel and the DTV transmitter power is evenly distributed across a 5.4 MHz channel.

DTV power in a 12.5 kHz channel is 26.35 dB down from 3.42 kW resulting in a max ERP of:
 $3.42 \text{ kW} = 65.34 \text{ dBm} - 26.35 = 38.99 \text{ dBm}$ or 7.925 watts.

Signal level at Todt Hill receive antenna should be $38.99 \text{ dBm} - 127.3 \text{ dB} - 2.6 \text{ dB} = -90.9 \text{ dBm}$

The receiver signal level at the Todt Hill antenna must be adjusted for 10 dB antenna gain, 1.9 dB line loss and 1 dB filter loss = 7.1 dB

The computed WTSD signal level at the receiver (spectrum analyzer) input would be -83.8 dBm at Todt Hill site.

The -165 dBm/Hz measured noise floor corrected for the 12.5 kHz channel is 40.97 dB lower or -124.1 dBm.

Therefore, for full 15 kW ERP the calculated WTSD signal level at the receiver input is $(-83.8) - (-124.1) = 40.3 \text{ dB}$ above the noise floor.

The signal level measured at this site as specified in the August 19th report was -138.6 dBm/Hz or -97.63 dBm in a 12.5 kHz channel for 1/10 power or -87.63 dBm for the full 15 kW ERP. The discrepancy between calculated signal and measured signal is -3.8 dB with the measured signal being less than calculated as would be the case when diffraction and partial Fresnel loss are considered.

Recommendation for WTSD initial resumption of transmission:

To determine the recommended level of power reduction it is necessary to look at several factors. First, and most stringent, is to determine the level of power reduction necessary to reduce the signal level down to the noise floor at the Todt Hill site. Employing the measured WTSD received signal level of -87.63 dBm and the noise floor of -124.1 dBm a 36.47 dB power

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WTSD FACILITY ANALYSIS WITH REGARD TO POSSIBLE INTERFERENCE TO PLMR FACILITIES UTILIZING UHF-T CH 16 SPECTRUM

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reduction from full licensed ERP would be required which is a maximum ERP of 3.38 watts. This is our worst case calculation of power reduction.

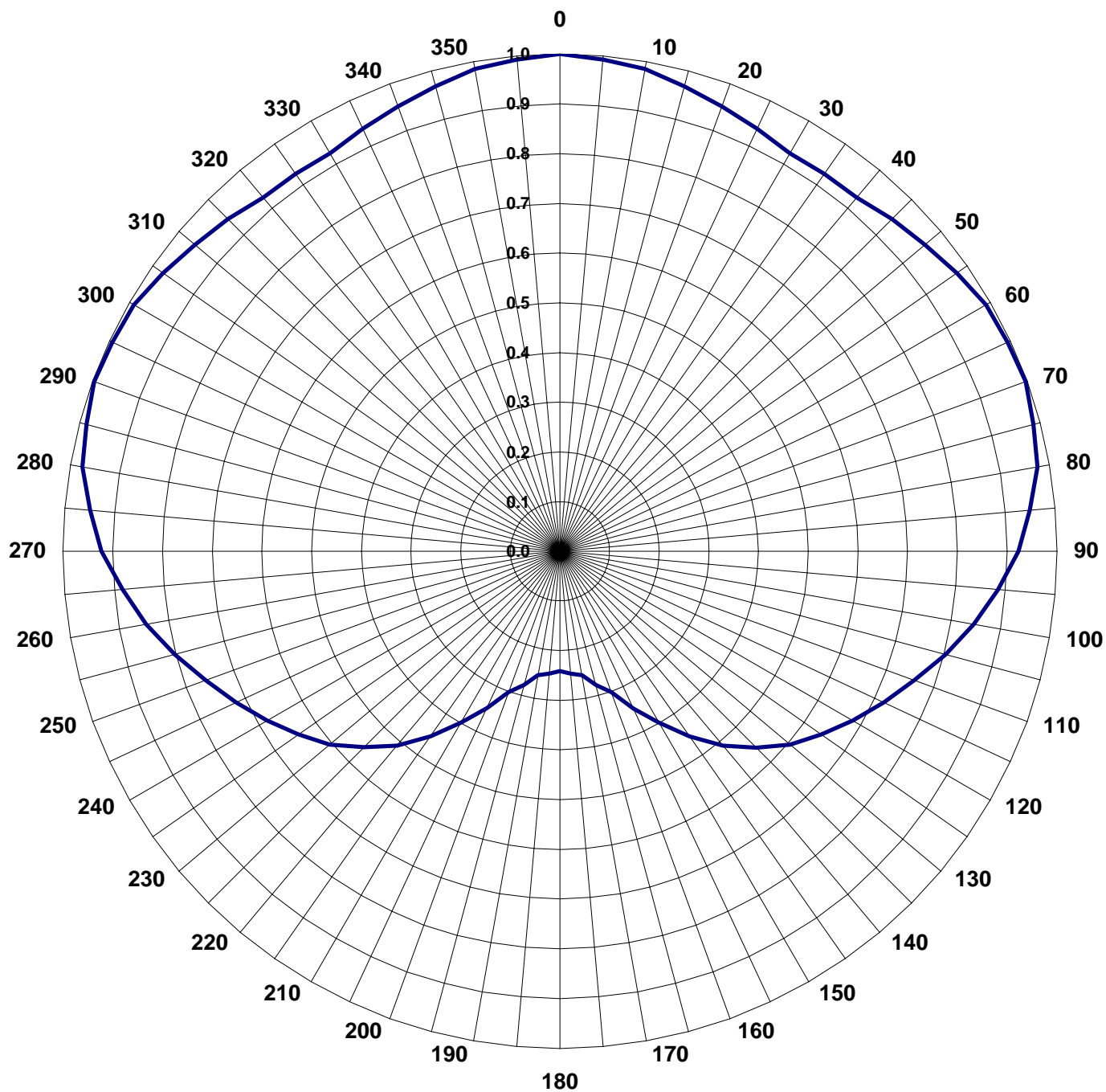
Second, we must consider the system design based on FCC DA 02-1319 and TIA –TSB88.2-C standards which set the limit of protected service at the 39 dBu contour F(50,50) or -89.5 dBm at 483 MHz. At this contour, for this frequency, the FCC C/I ratio is 19.2 dB and the interfering signal amplitude not to be exceeded is -108.7 dBm. This value is 15.4 dB above the measured noise floor and 9.2 dB below the power level employed during which tests were undertaken on July 31, 2012. If the WTSD maximum ERP were reduced by 21.37 dB (109.4 watts) the signal level at the receiver front end would be -109 dBm.

Third, tests run by the Motorola engineer on July 31, 2012 determined that the 12 dB SINAD for the receiver occurred at -97 dBm which is approximately 7.5 dB below the protected signal level. It is not unreasonable to assume that a typical radio in this environment would exhibit a 12 dB SINAD at no less than – 110 dBm. To keep the WTSD signal at -110 dBm a 22.37 dB power reduction would be required resulting in a power reduction to 87 watts maximum ERP.

The intent of this exercise is to look at the variables and select a power level that is believed to be one which will result in no practically perceptible impact to the existing LMR system. Based on the information at hand it is proposed to add an additional 6 dB of attenuation to the -110 dBm value to reduce the WTSD signal to -116 dBm for initial testing purposes. This is a total attenuation of 28.37 dB resulting in a reduction in maximum ERP from 15,000 watts to 21.83 watts. It is assumed that after a reasonable test period, without increased interference, that an additional, mutually agreeable, adjustment may be implemented while a permanent facility change is planned and implemented.

AZIMUTH PATTERN**TYPE:****ALP-W****Frequency:****16 (DTV)****Directivity:****Numeric****dB****1.56****1.93****Location:****Philadelphia, PA****Polarization:****Horizontal****Peak(s) at:**

Note: Simulated pattern. Shape and directivity may vary with actual configuration.



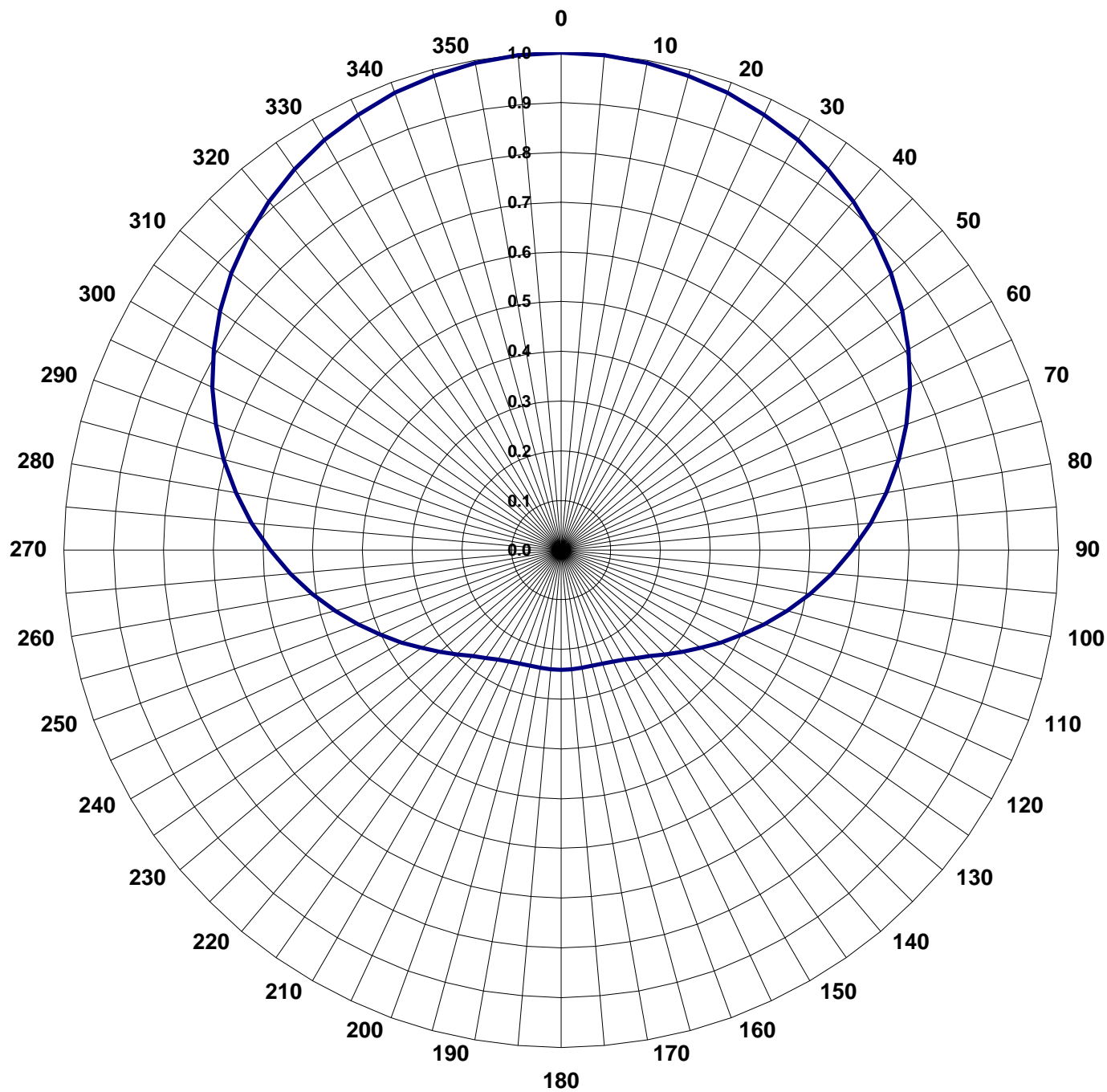
TABULATED DATA FOR AZIMUTH PATTERN

TYPE: ALP-W

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	0.907	-0.85	184	0.246	-12.18	276	0.954	-0.41
2	0.997	-0.03	94	0.891	-1.00	186	0.248	-12.11	278	0.964	-0.32
4	0.994	-0.05	96	0.876	-1.15	188	0.251	-12.01	280	0.975	-0.22
6	0.991	-0.08	98	0.860	-1.31	190	0.253	-11.94	282	0.979	-0.18
8	0.988	-0.10	100	0.845	-1.46	192	0.263	-11.60	284	0.984	-0.14
10	0.985	-0.13	102	0.828	-1.64	194	0.273	-11.28	286	0.988	-0.10
12	0.978	-0.19	104	0.810	-1.83	196	0.282	-11.00	288	0.993	-0.06
14	0.971	-0.26	106	0.793	-2.01	198	0.292	-10.69	290	0.997	-0.03
16	0.965	-0.31	108	0.775	-2.21	200	0.302	-10.40	292	0.996	-0.03
18	0.958	-0.37	110	0.758	-2.41	202	0.321	-9.87	294	0.994	-0.05
20	0.951	-0.44	112	0.742	-2.59	204	0.340	-9.37	296	0.993	-0.06
22	0.946	-0.48	114	0.727	-2.77	206	0.359	-8.90	298	0.991	-0.08
24	0.941	-0.53	116	0.711	-2.96	208	0.378	-8.45	300	0.990	-0.09
26	0.935	-0.58	118	0.696	-3.15	210	0.397	-8.02	302	0.984	-0.14
28	0.930	-0.63	120	0.680	-3.35	212	0.420	-7.54	304	0.978	-0.19
30	0.925	-0.68	122	0.665	-3.54	214	0.442	-7.09	306	0.971	-0.26
32	0.926	-0.67	124	0.650	-3.74	216	0.465	-6.65	308	0.965	-0.31
34	0.927	-0.66	126	0.635	-3.94	218	0.487	-6.25	310	0.959	-0.36
36	0.927	-0.66	128	0.620	-4.15	220	0.510	-5.85	312	0.953	-0.42
38	0.928	-0.65	130	0.605	-4.36	222	0.529	-5.53	314	0.947	-0.47
40	0.929	-0.64	132	0.586	-4.64	224	0.548	-5.22	316	0.941	-0.53
42	0.935	-0.58	134	0.567	-4.93	226	0.567	-4.93	318	0.935	-0.58
44	0.941	-0.53	136	0.548	-5.22	228	0.586	-4.64	320	0.929	-0.64
46	0.947	-0.47	138	0.529	-5.53	230	0.605	-4.36	322	0.928	-0.65
48	0.953	-0.42	140	0.510	-5.85	232	0.620	-4.15	324	0.927	-0.66
50	0.959	-0.36	142	0.487	-6.25	234	0.635	-3.94	326	0.927	-0.66
52	0.965	-0.31	144	0.465	-6.65	236	0.650	-3.74	328	0.926	-0.67
54	0.971	-0.26	146	0.442	-7.09	238	0.665	-3.54	330	0.925	-0.68
56	0.978	-0.19	148	0.420	-7.54	240	0.680	-3.35	332	0.930	-0.63
58	0.984	-0.14	150	0.397	-8.02	242	0.696	-3.15	334	0.935	-0.58
60	0.990	-0.09	152	0.378	-8.45	244	0.711	-2.96	336	0.941	-0.53
62	0.991	-0.08	154	0.359	-8.90	246	0.727	-2.77	338	0.946	-0.48
64	0.993	-0.06	156	0.340	-9.37	248	0.742	-2.59	340	0.951	-0.44
66	0.994	-0.05	158	0.321	-9.87	250	0.758	-2.41	342	0.958	-0.37
68	0.996	-0.03	160	0.302	-10.40	252	0.775	-2.21	344	0.965	-0.31
70	0.997	-0.03	162	0.292	-10.69	254	0.793	-2.01	346	0.971	-0.26
72	0.993	-0.06	164	0.282	-11.00	256	0.810	-1.83	348	0.978	-0.19
74	0.988	-0.10	166	0.273	-11.28	258	0.828	-1.64	350	0.985	-0.13
76	0.984	-0.14	168	0.263	-11.60	260	0.845	-1.46	352	0.988	-0.10
78	0.979	-0.18	170	0.253	-11.94	262	0.860	-1.31	354	0.991	-0.08
80	0.975	-0.22	172	0.251	-12.01	264	0.876	-1.15	356	0.994	-0.05
82	0.964	-0.32	174	0.248	-12.11	266	0.891	-1.00	358	0.997	-0.03
84	0.954	-0.41	176	0.246	-12.18	268	0.907	-0.85	360	1.000	0.00
86	0.943	-0.51	178	0.243	-12.29	270	0.922	-0.71			
88	0.933	-0.60	180	0.241	-12.36	272	0.933	-0.60			
90	0.922	-0.71	182	0.243	-12.29	274	0.943	-0.51			

AZIMUTH PATTERN**TYPE:****ALP-W-V****Frequency:****16 (DTV)****Numeric****dB****Location:****Philadelphia, PA****Directivity:****2.28****3.58****Polarization:****Vertical****Peak(s) at:**

Note: Simulated pattern. Shape and directivity may vary with actual configuration.



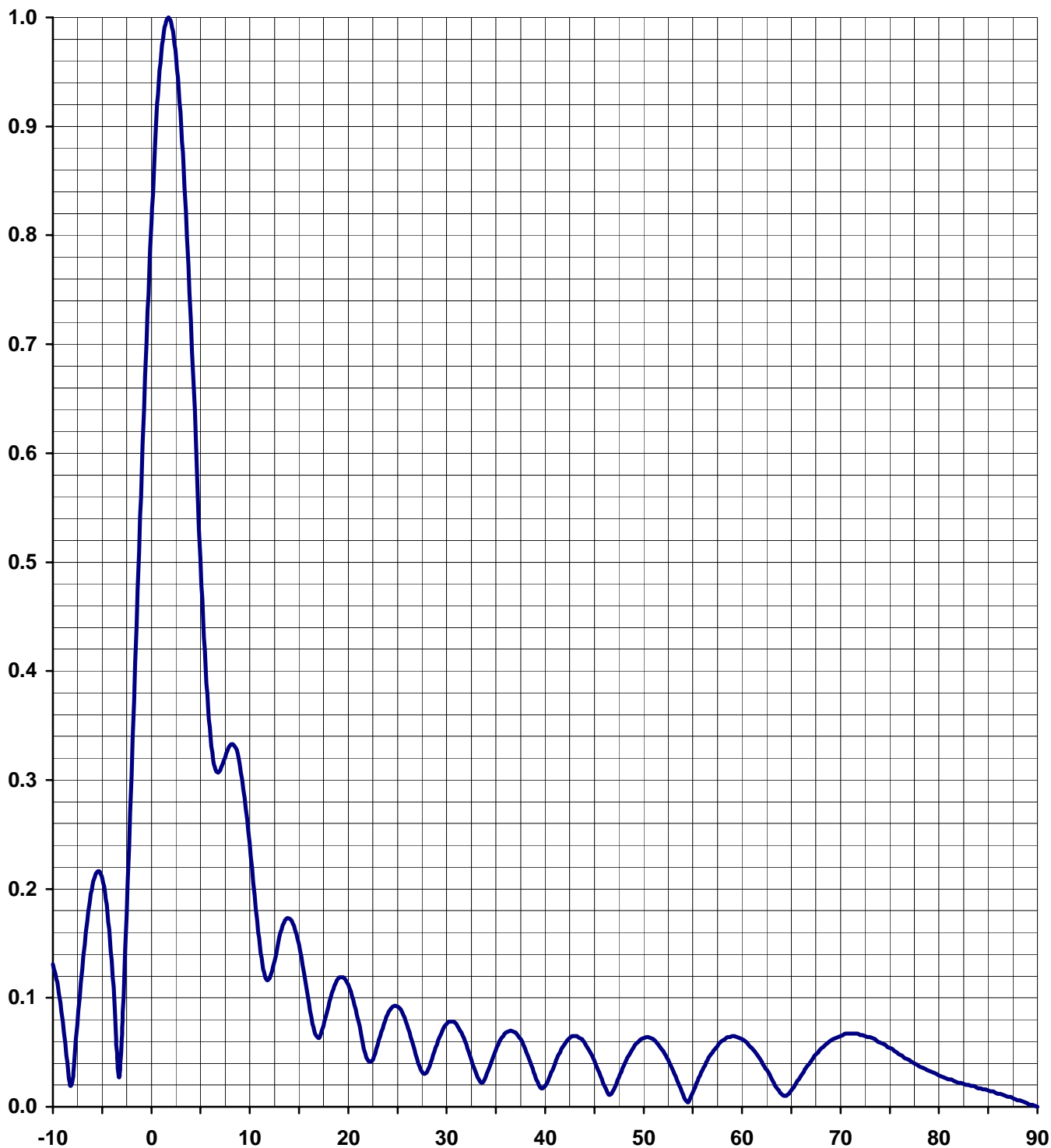
TABULATED DATA FOR AZIMUTH PATTERN**TYPE: ALP-W-V**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	0.570	-4.88	184	0.241	-12.36	276	0.632	-3.99
2	1.000	0.00	94	0.554	-5.13	186	0.241	-12.36	278	0.648	-3.77
4	0.999	-0.01	96	0.538	-5.38	188	0.241	-12.36	280	0.664	-3.56
6	0.998	-0.02	98	0.523	-5.63	190	0.241	-12.36	282	0.679	-3.36
8	0.996	-0.03	100	0.508	-5.88	192	0.241	-12.36	284	0.694	-3.17
10	0.995	-0.04	102	0.493	-6.14	194	0.241	-12.36	286	0.709	-2.99
12	0.992	-0.07	104	0.478	-6.41	196	0.242	-12.32	288	0.724	-2.81
14	0.989	-0.10	106	0.463	-6.69	198	0.242	-12.32	290	0.739	-2.63
16	0.986	-0.12	108	0.449	-6.96	200	0.243	-12.29	292	0.753	-2.46
18	0.982	-0.16	110	0.435	-7.23	202	0.245	-12.22	294	0.767	-2.30
20	0.978	-0.19	112	0.422	-7.49	204	0.246	-12.18	296	0.781	-2.15
22	0.974	-0.23	114	0.408	-7.79	206	0.248	-12.11	298	0.794	-2.00
24	0.969	-0.27	116	0.396	-8.05	208	0.251	-12.01	300	0.807	-1.86
26	0.963	-0.33	118	0.383	-8.34	210	0.254	-11.90	302	0.819	-1.73
28	0.957	-0.38	120	0.371	-8.61	212	0.258	-11.77	304	0.832	-1.60
30	0.951	-0.44	122	0.360	-8.87	214	0.262	-11.63	306	0.843	-1.48
32	0.945	-0.49	124	0.348	-9.17	216	0.267	-11.47	308	0.855	-1.36
34	0.937	-0.57	126	0.338	-9.42	218	0.272	-11.31	310	0.866	-1.25
36	0.930	-0.63	128	0.328	-9.68	220	0.278	-11.12	312	0.876	-1.15
38	0.922	-0.71	130	0.318	-9.95	222	0.285	-10.90	314	0.886	-1.05
40	0.914	-0.78	132	0.309	-10.20	224	0.292	-10.69	316	0.896	-0.95
42	0.905	-0.87	134	0.300	-10.46	226	0.300	-10.46	318	0.905	-0.87
44	0.896	-0.95	136	0.292	-10.69	228	0.309	-10.20	320	0.914	-0.78
46	0.886	-1.05	138	0.285	-10.90	230	0.318	-9.95	322	0.922	-0.71
48	0.876	-1.15	140	0.278	-11.12	232	0.328	-9.68	324	0.930	-0.63
50	0.866	-1.25	142	0.272	-11.31	234	0.338	-9.42	326	0.937	-0.57
52	0.855	-1.36	144	0.267	-11.47	236	0.348	-9.17	328	0.945	-0.49
54	0.843	-1.48	146	0.262	-11.63	238	0.360	-8.87	330	0.951	-0.44
56	0.832	-1.60	148	0.258	-11.77	240	0.371	-8.61	332	0.957	-0.38
58	0.819	-1.73	150	0.254	-11.90	242	0.383	-8.34	334	0.963	-0.33
60	0.807	-1.86	152	0.251	-12.01	244	0.396	-8.05	336	0.969	-0.27
62	0.794	-2.00	154	0.248	-12.11	246	0.408	-7.79	338	0.974	-0.23
64	0.781	-2.15	156	0.246	-12.18	248	0.422	-7.49	340	0.978	-0.19
66	0.767	-2.30	158	0.245	-12.22	250	0.435	-7.23	342	0.982	-0.16
68	0.753	-2.46	160	0.243	-12.29	252	0.449	-6.96	344	0.986	-0.12
70	0.739	-2.63	162	0.242	-12.32	254	0.463	-6.69	346	0.989	-0.10
72	0.724	-2.81	164	0.242	-12.32	256	0.478	-6.41	348	0.992	-0.07
74	0.709	-2.99	166	0.241	-12.36	258	0.493	-6.14	350	0.995	-0.04
76	0.694	-3.17	168	0.241	-12.36	260	0.508	-5.88	352	0.996	-0.03
78	0.679	-3.36	170	0.241	-12.36	262	0.523	-5.63	354	0.998	-0.02
80	0.664	-3.56	172	0.241	-12.36	264	0.538	-5.38	356	0.999	-0.01
82	0.648	-3.77	174	0.241	-12.36	266	0.554	-5.13	358	1.000	0.00
84	0.632	-3.99	176	0.241	-12.36	268	0.570	-4.88	360	1.000	0.00
86	0.617	-4.19	178	0.241	-12.36	270	0.585	-4.66			
88	0.601	-4.42	180	0.241	-12.36	272	0.601	-4.42			
90	0.585	-4.66	182	0.241	-12.36	274	0.617	-4.19			

ELEVATION PATTERN

TYPE:	AL12L7H	
Directivity:	Numeric	dBd
Main Lobe:	12.00	10.79
Horizontal:	7.93	8.99

Frequency:	16 (DTV)
Location:	Philadelphia, PA
Beam Tilt:	1.75
Polarization:	Horizontal/ Vertical



TABULATED DATA FOR ELEVATION PATTERN

TYPE AL12L7H			-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
-10.00	0.131	-17.65	2.00	0.996	-0.03	18.00	0.092	-20.72	42.00	0.058	-24.73	66.00	0.029	-30.75
-9.75	0.122	-18.27	2.25	0.984	-0.14	18.50	0.108	-19.33	42.50	0.063	-24.01	66.50	0.036	-28.87
-9.50	0.111	-19.09	2.50	0.965	-0.31	19.00	0.118	-18.56	43.00	0.065	-23.74	67.00	0.042	-27.54
-9.25	0.096	-20.35	2.75	0.938	-0.56	19.50	0.119	-18.49	43.50	0.063	-24.01	67.50	0.048	-26.38
-9.00	0.078	-22.16	3.00	0.905	-0.87	20.00	0.112	-19.02	44.00	0.059	-24.58	68.00	0.053	-25.51
-8.75	0.058	-24.73	3.25	0.866	-1.25	20.50	0.098	-20.18	44.50	0.051	-25.85	68.50	0.057	-24.88
-8.50	0.036	-28.87	3.50	0.822	-1.70	21.00	0.079	-22.05	45.00	0.042	-27.54	69.00	0.061	-24.29
-8.25	0.019	-34.42	3.75	0.773	-2.24	21.50	0.058	-24.73	45.50	0.031	-30.17	69.50	0.063	-24.01
-8.00	0.026	-31.70	4.00	0.721	-2.84	22.00	0.043	-27.33	46.00	0.019	-34.42	70.00	0.065	-23.74
-7.75	0.049	-26.20	4.25	0.667	-3.52	22.50	0.043	-27.33	46.50	0.011	-39.17	70.50	0.067	-23.48
-7.50	0.075	-22.50	4.50	0.612	-4.26	23.00	0.057	-24.88	47.00	0.016	-35.92	71.00	0.067	-23.48
-7.25	0.101	-19.91	4.75	0.557	-5.08	23.50	0.072	-22.85	47.50	0.027	-31.37	71.50	0.067	-23.48
-7.00	0.126	-17.99	5.00	0.504	-5.95	24.00	0.085	-21.41	48.00	0.038	-28.40	72.00	0.066	-23.61
-6.75	0.149	-16.54	5.25	0.454	-6.86	24.50	0.092	-20.72	48.50	0.047	-26.56	72.50	0.065	-23.74
-6.50	0.170	-15.39	5.50	0.409	-7.77	25.00	0.092	-20.72	49.00	0.055	-25.19	73.00	0.064	-23.88
-6.25	0.188	-14.52	5.75	0.371	-8.61	25.50	0.087	-21.21	49.50	0.060	-24.44	73.50	0.062	-24.15
-6.00	0.202	-13.89	6.00	0.342	-9.32	26.00	0.075	-22.50	50.00	0.063	-24.01	74.00	0.059	-24.58
-5.75	0.211	-13.51	6.25	0.321	-9.87	26.50	0.060	-24.44	50.50	0.064	-23.88	74.50	0.057	-24.88
-5.50	0.216	-13.31	6.50	0.310	-10.17	27.00	0.044	-27.13	51.00	0.062	-24.15	75.00	0.054	-25.35
-5.25	0.216	-13.31	6.75	0.307	-10.26	27.50	0.032	-29.90	51.50	0.057	-24.88	75.50	0.051	-25.85
-5.00	0.210	-13.56	7.00	0.309	-10.20	28.00	0.032	-29.90	52.00	0.051	-25.85	76.00	0.048	-26.38
-4.75	0.199	-14.02	7.25	0.315	-10.03	28.50	0.044	-27.13	52.50	0.043	-27.33	76.50	0.045	-26.94
-4.50	0.181	-14.85	7.50	0.321	-9.87	29.00	0.057	-24.88	53.00	0.033	-29.63	77.00	0.043	-27.33
-4.25	0.157	-16.08	7.75	0.328	-9.68	29.50	0.069	-23.22	53.50	0.022	-33.15	77.50	0.040	-27.96
-4.00	0.127	-17.92	8.00	0.332	-9.58	30.00	0.076	-22.38	54.00	0.011	-39.17	78.00	0.037	-28.64
-3.75	0.092	-20.72	8.25	0.333	-9.55	30.50	0.078	-22.16	54.50	0.004	-47.96	78.50	0.035	-29.12
-3.50	0.053	-25.51	8.50	0.330	-9.63	31.00	0.076	-22.38	55.00	0.013	-37.72	79.00	0.033	-29.63
-3.25	0.027	-31.37	8.75	0.324	-9.79	31.50	0.068	-23.35	55.50	0.024	-32.40	79.50	0.031	-30.17
-3.00	0.061	-24.29	9.00	0.314	-10.06	32.00	0.057	-24.88	56.00	0.034	-29.37	80.00	0.029	-30.75
-2.75	0.115	-18.79	9.25	0.300	-10.46	32.50	0.043	-27.33	56.50	0.043	-27.33	80.50	0.027	-31.37
-2.50	0.175	-15.14	9.50	0.283	-10.96	33.00	0.030	-30.46	57.00	0.050	-26.02	81.00	0.025	-32.04
-2.25	0.238	-12.47	9.75	0.264	-11.57	33.50	0.022	-33.15	57.50	0.056	-25.04	81.50	0.024	-32.40
-2.00	0.304	-10.34	10.00	0.242	-12.32	34.00	0.028	-31.06	58.00	0.061	-24.29	82.00	0.022	-33.15
-1.75	0.372	-8.59	10.50	0.194	-14.24	34.50	0.040	-27.96	58.50	0.064	-23.88	82.50	0.021	-33.56
-1.50	0.441	-7.11	11.00	0.150	-16.48	35.00	0.052	-25.68	59.00	0.065	-23.74	83.00	0.020	-33.98
-1.25	0.509	-5.87	11.50	0.121	-18.34	35.50	0.062	-24.15	59.50	0.064	-23.88	83.50	0.019	-34.42
-1.00	0.576	-4.79	12.00	0.118	-18.56	36.00	0.068	-23.35	60.00	0.062	-24.15	84.00	0.017	-35.39
-0.75	0.640	-3.88	12.50	0.134	-17.46	36.50	0.070	-23.10	60.50	0.059	-24.58	84.50	0.016	-35.92
-0.50	0.702	-3.07	13.00	0.155	-16.19	37.00	0.068	-23.35	61.00	0.054	-25.35	85.00	0.015	-36.48
-0.25	0.760	-2.38	13.50	0.169	-15.44	37.50	0.062	-24.15	61.50	0.048	-26.38	85.50	0.014	-37.08
0.00	0.813	-1.80	14.00	0.173	-15.24	38.00	0.053	-25.51	62.00	0.041	-27.74	86.00	0.012	-38.42
0.25	0.861	-1.30	14.50	0.166	-15.60	38.50	0.041	-27.74	62.50	0.034	-29.37	86.50	0.011	-39.17
0.50	0.902	-0.90	15.00	0.149	-16.54	39.00	0.028	-31.06	63.00	0.026	-31.70	87.00	0.009	-40.92
0.75	0.937	-0.57	15.50	0.123	-18.20	39.50	0.018	-34.89	63.50	0.018	-34.89	87.50	0.008	-41.94
1.00	0.964	-0.32	16.00	0.095	-20.45	40.00	0.019	-34.42	64.00	0.012	-38.42	88.00	0.006	-44.44
1.25	0.984	-0.14	16.50	0.071	-22.97	40.50	0.029	-30.75	64.50	0.010	-40.00	88.50	0.005	-46.02
1.50	0.996	-0.03	17.00	0.063	-24.01	41.00	0.040	-27.96	65.00	0.015	-36.48	89.00	0.003	-50.46
1.75	1.000	0.00	17.50	0.074	-22.62	41.50	0.050	-26.02	65.50	0.022	-33.15	89.50	0.002	-53.98
												90.00	0.000	---