

TECHNICAL EXHIBIT  
APPLICATION FOR CONSTRUCTION PERMIT  
TELEVISION STATION WEDN-DT  
NORWICH, CONNECTICUT

June 9, 2003

CHANNEL 32 0.5 KW (MAX-DA) 192 M

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Technical Statement

This Technical Exhibit was prepared on behalf of Connecticut Public Broadcasting, Inc. (“CPBI”) in support of an application for construction permit for digital television broadcast station WEDN-DT, Norwich, Connecticut. WEDN-DT is paired with analog NTSC TV station WEDN(TV), Norwich, Connecticut, Channel 53. WEDN-DT was allotted Channel 45 as its transitional DTV allotment channel. Pursuant to Section 73.623(g) of the FCC Rules, a DTV allotment channel exchange is proposed between WEDN-DT and CPBI station WEDH-DT, Hartford, Connecticut, Channel 32. Under this proposal WEDN-DT will operate on Channel 32 at Norwich. An application is being filed for Channel 45 at Hartford for WEDH-DT in conjunction with the instant application.

The proposed digital facility will operate on Channel 32 with maximum average effective radiated power (“ERP”) of 0.5 kW and an antenna radiation center height above average terrain (“HAAT”) of 192 m. As described in detail herein, the proposal meets the *de minimis* interference protection requirements as outlined FCC’s DTV Processing Guidelines,<sup>\*</sup> the FCC’s *Second Memorandum Opinion and Order*,<sup>†</sup> and

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<sup>\*</sup> See FCC *Public Notice*, “Additional Application Processing Guidelines for Digital Television (DTV)”, Released: August 10, 1998.

<sup>†</sup> See *Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders*, FCC-98-315, Released: December 18, 1998.

the DTV *Report and Order and Further Notice of Proposed Rule Making*.<sup>‡</sup> Technical specifications for the proposed operation are included herein as Figure 1.

### Proposed Facilities

The proposed transmitting antenna will be top-mounted on the existing WEDN tower located on Bishop Road near Fitchville, Connecticut. The antenna center of radiation will be located at 129 m above ground level (284 m AMSL). Figure 2 is a sketch of the proposed antenna and supporting structure.

The proposed facility provides minimum 48 dBu, f(50,90), coverage of Norwich in compliance with Section 73.625(a)(1) of the FCC Rules, as adopted by the FCC in MM Docket No. 00-39. Figure 3 herein is a map depicting the predicted coverage contours of the proposed facility.

The proposed facility meets the maximum permissible ERP requirements for UHF DTV stations as outlined in Section 73.623(f)(8)(i) of the FCC Rules. According to this section of the Rules, considering a proposed antenna height above average terrain for the proposed WEDN-DT facility of 192 m, the maximum permissible ERP is 1000 kW.

The proposed transmitter is located approximately 389 km from the closest point on the border with Canada. The proposed facility is located within the U.S./Canadian “border area.” There is further discussion below concerning compliance with the U.S./Canadian allocation requirements. The closest FCC Monitoring station is located at Belfast, Maine at a distance of 411 km at a bearing of 37°True. The proposal is located more than 3.2 km from the closest AM broadcast facility.

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<sup>‡</sup> See *Report and Order and Further Notice of Proposed Rule Making* in MM Docket No. 00-39, FCC 01-24, released January 19, 2001.

No adverse electromagnetic impact is expected as a result of the proposed operation. However, the applicant recognizes its responsibility to correct objectionable electromagnetic interference problems that result from its proposed operation.

#### Tower Registration

The proposed antenna structure has been registered with the FCC. The FCC antenna structure registration number is 1035286. There will be no change in the overall height of the antenna structure as a result of the instant proposal.

#### Domestic Allocation Considerations

The proposed WEDN-DT Channel 32 facility meets the requirements of Section 73.623 of the FCC Rules concerning predicted interference to other existing U.S. NTSC facilities and U.S. DTV allotments and assignments. Longley-Rice interference analyses were conducted pursuant to the requirements of the FCC Rules; OET Bulletin No. 69; and published FCC guidelines for preparation of such interference analyses. The Longley-Rice interference analyses were conducted using the software maintained by du Treil, Lundin & Rackley, Inc. based on the FCC published software routines.<sup>§</sup> Stations selected for analysis were determined pursuant to the distance requirements outlined in the FCC DTV Processing Guidelines Public Notice. Accordingly, co-channel DTV and NTSC stations within 429 km and 407 km, respectively, were examined for potential interference; and first-adjacent DTV and NTSC stations within 229 km and 207 km, respectively, were examined for potential interference. Analog taboo-related NTSC stations within 142 km were examined for potential interference. The results of the interference analyses for the proposed WEDN-DT facility are summarized herein at Figure 4. As indicated therein, the

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<sup>§</sup> The duTreil, Lundin & Rackley, Inc. DTV interference analysis program is a precise implementation of the procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 2 km was employed.

proposed facility will meet the 2%/10% criterion outlined in the FCC Rules and published guidelines with respect to all considered stations.\*\*

With respect to Class A TV station protection, the proposal has been evaluated according to the requirements of Section 73.623(c)(5) of the FCC Rules. The analysis reveals no potentially affected Class A TV stations.

#### Canadian Allocation Considerations

An allocation study was conducted in accordance with the principals of the U.S./Canadian *Letter of Understanding Concerning Digital Television*<sup>††</sup> (“LOU”) for the WEDN-DT facility. An analysis was conducted according to the spacing requirements of Appendix 2 of LOU with WEDN-DT assumed to be equivalent to Canadian Class B. The following table summarizes the spacing analysis for all pertinent Canadian allotments identified with a buffer distance of 250 km greater than the largest relevant separation requirement:

Channel	Type	Location	Class	Required Spacing (km)	Actual Spacing (km)	Result
32	DT	Kingston-ON	C	250.0	467.6	217.6 km clear

As indicated, the Kingston allotment meets the separation requirements with respect to the WEDN-DT proposal. Therefore, based on the foregoing we find that the WEDN-DT

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\*\* Interference analysis results reflect the net change in interference to a given station considering the interference predicted to occur from all other stations (i.e. “masking”) including the original allotment facility for WEDH-DT (Channel 32) at Hartford. This properly reflects the net interference change for determining compliance with the FCC DTV2%/10% *de minimis* standard.

<sup>††</sup> *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 22, 2000.

proposed facility meets the spacing requirements of the LOU and no further study is required.

### Environmental Considerations

With respect to the potential for human exposure to radio frequency (RF) radiation, calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01) indicate that the proposal will not result in human exposure to RF radiation at ground level in excess of FCC standards. Power density calculations were conducted at 2-m above ground<sup>††</sup> based on the following conservative assumptions, with the following results:

<b>Call Sign</b>	<b>Channel</b>	<b>Peak Visual ERP or Average ERP (kW)</b>	<b>Aural ERP (kW)</b>	<b>Relative Field Factor<sup>§§</sup></b>	<b>FCC Limit<sup>***</sup> (mW/cm<sup>2</sup>)</b>	<b>Percentage of Limit</b>
WEDN-DT	32	0.5	--	0.30	0.385	0.02%

As indicated above, the exposure to RF radiation at 2-m above ground level will not exceed 0.02% of the FCC limit for general population / uncontrolled exposure. Therefore, the proposal complies with the FCC limits for human exposure to RF radiation and it is categorically excluded from environmental processing. The applicant, in coordination with the other users of the transmission facility, shall reduce power or

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<sup>††</sup> The radiation center height above ground is 129 m.

<sup>§§</sup> This is a conservative estimate of the relative field factor in the downward direction.

<sup>\*\*\*</sup> for general population/uncontrolled environments

cease operation as necessary to protect persons having access to the tower or antenna from RF radiation in excess of the FCC guidelines.

Louis Robert du Treil, Jr.

du Treil, Lundin & Rackley, Inc.  
201 Fletcher Ave.  
Sarasota, FL 34237-6019

June 9, 2003



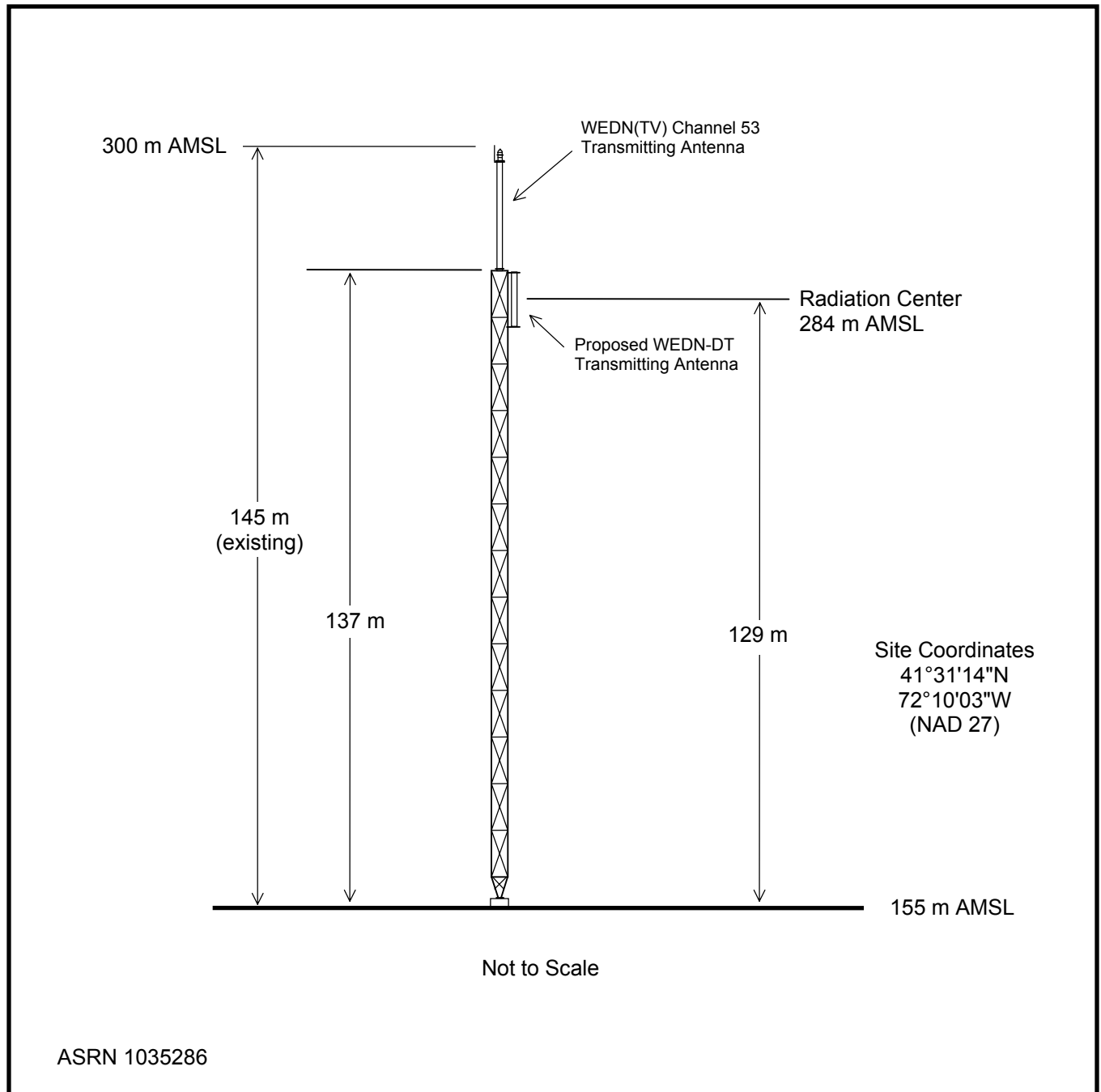
Figure 1

TECHNICAL EXHIBIT  
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NORWICH, CONNECTICUT  
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Technical Specifications

Channel / Frequency Band	32 / 578-584 MHz
Site Coordinates (NAD 27)	41°31'14" North Latitude 72°10'03" West Longitude
Site elevation	155 m AMSL
Average elevation of standard eight radials, 3 to 16 km	92 m AMSL
Overall height of existing structure	145 m AGL / 300 m AMSL
Height of antenna radiation center	129 m AGL / 284 m AMSL
Antenna radiation center HAAT	192 m
ASRN	1035286

Proposed Operation	
Parameter	DTV
Transmitter power output	-15.82 dBk (0.026 kW)
Transmission line loss (Dielectric, model EIA 3-inch 50-ohm rigid coaxial, line, 137 meter, 450-ft)	1.14 dB
Antenna input power	-16.96 dBk
Antenna gain (Andrew, model ALP8L1-HSBR-32)	13.96 dB
Effective radiated power (ERP)	-3.0 dBk (0.5 kW)



## **PROPOSED ANTENNA AND SUPPORTING STRUCTURE**

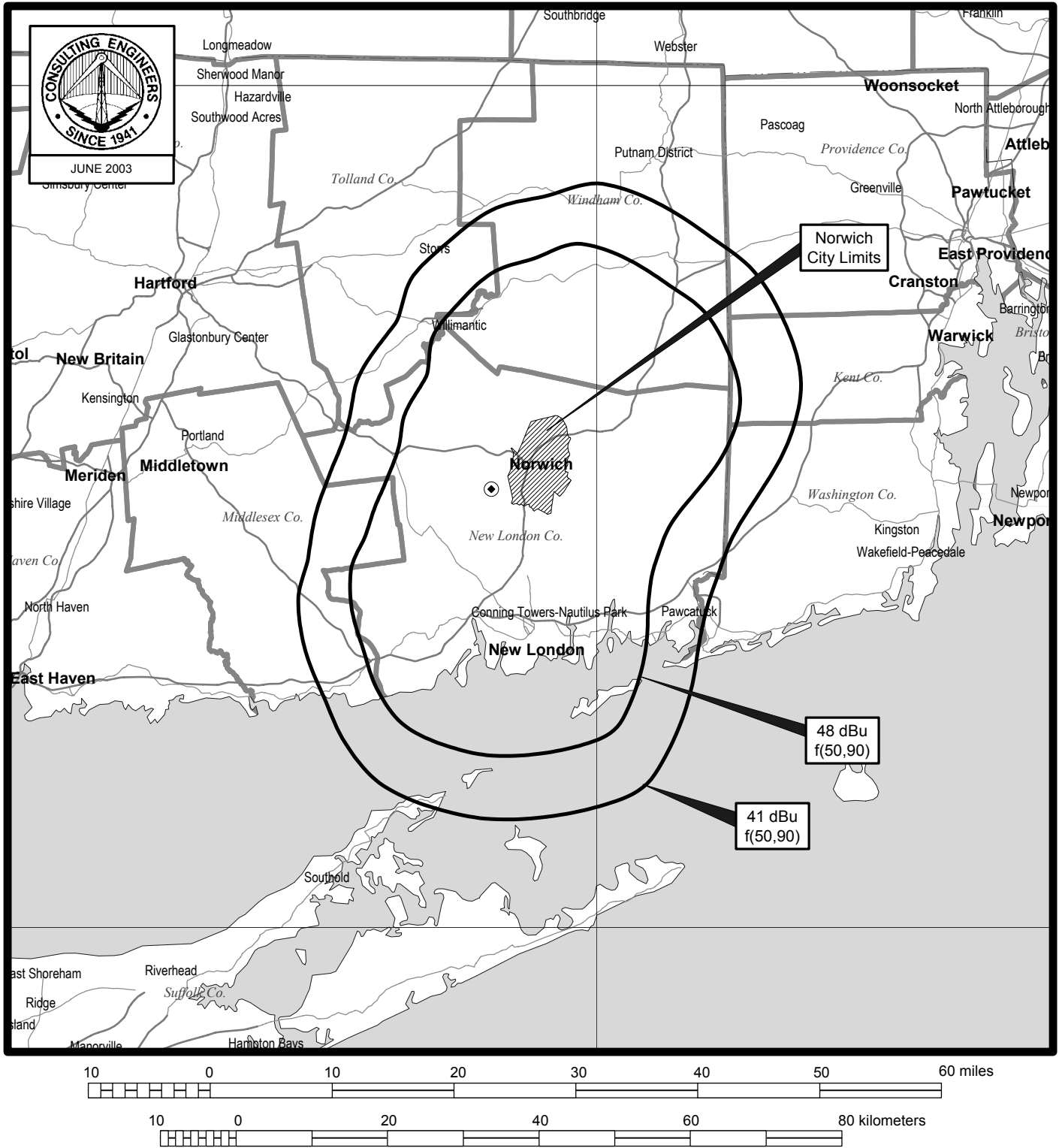
TELEVISION STATION WEDN-DT

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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 3



## PREDICTED COVERAGE CONTOURS

TELEVISION STATION WEDN-DT  
HARTFORD, CONNECTICUT  
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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

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Summary of Domestic Allocation Analysis

Stations Potentially Affected by Proposed Station							
Facility Number	Channel	Call	City State	Distance (km)	Status	Application Prefix	Application Reference Number
1	17	WPXQ	BLOCK ISLAND RI	44.9	APP	BPCT	20020213AAG
2	18	WUVN	HARTFORD CT	59.7	LIC	BLCT	19870304KI
3	24	WEDN	HARTFORD CT	60	LIC	BLET	341
4	25	WFXT	BOSTON MA	117.2	LIC	BMLCT	19911001LV
5	28	WLWC	NEW BEDFORD MA	106.8	LIC	BLCT	19970424KE
6	30	WVIT	NEW BRITAIN CT	58.8	LIC	BLCT	19791113LC
7	31	WTIC-TV	HARTFORD CT	58.9	LIC	BPRM	20001020ACY
8	31	WFXT	BOSTON MA	117.2	APP	BPCDT	19990526KH
9	31	WFXT-DT	BOSTON MA	117.2	PLN	DTVPLN	DTVP0825

Stations Potentially Affected by Proposed Station							
Facility Number	Channel	Call	City State	Distance (km)	Status	Application Prefix	Application Reference Number
10	31	WPXN-TV	NEW YORK NY	178.8	LIC	BLCT	19860703KH
11	32	WABU-DT	BOSTON MA	128.4	PLN	DTVPLN	DTVP0867
12	32	WBPX	BOSTON MA	117.2	APP	BPCDT	19991101AFA
13	32	WPSG	PHILADELPHIA PA	306.1	CP MOD	BMPCDT	20020819AAK
14	32	WPSG-DT	PHILADELPHIA PA	306.3	PLN	DTVPLN	DTVP0877
15	32	WQPX	SCRANTON PA	296.5	APP	BMPCDT	20010510AAE
16	32	WSWB-DT	SCRANTON PA	296.4	PLN	DTVPLN	DTVP0878
17	32	WQPX	SCRANTON PA	298.3	CP	BPCDT	19990521KF
18	32	WETK	BURLINGTON VT	338.1	APP	BPEDT	20000427ACS
19	32	WETK-DT	BURLINGTON VT	338.1	PLN	DTVPLN	DTVP0887
20	33	WFSB-DT	HARTFORD CT	60.1	PLN	DTVPLN	DTVP0894
21	33	WFSB	HARTFORD CT	60.1	APP	BMPCDT	20021025ABB
22	33	WPXG	CONCORD NH	197.6	CP MOD	BMPCDT	20020320ACL
23	33	WNBU-DT	CONCORD NH	197.6	PLN	DTVPLN	DTVP0909
24	33	WPIX	NEW YORK NY	178.8	CP	BPCDT	19991019ABH
25	33	WPIX-DT	NEW YORK NY	178.8	PLN	DTVPLN	DTVP0911

Stations Potentially Affected by Proposed Station							
Facility Number	Channel	Call	City State	Distance (km)	Status	Application Prefix	Application Reference Number
26	36	WSBE-TV	PROVIDENCE RI	65.7	LIC	BLET	19860926KP
27	40	WGGB-TV	SPRINGFIELD MA	89.5	LIC	BLCT	19990429KH

Summary of Interference Analysis for Worst-Case Scenarios							
Facility Number	Interference Population Before Analysis	Interference Population After Analysis	Baseline Population	Net Change in Interference	Percent of Baseline	Permissible Percent of Baseline	Result
1	--	--	--	--	0.000	--	pass
2	--	--	--	--	0.000	--	pass
3	--	--	--	--	0.000	--	pass
4	--	--	--	--	0.000	--	pass
5	--	--	--	--	0.000	--	pass
6	--	--	--	--	0.000	--	pass
7	--	--	--	--	0.000	--	pass
8	--	--	--	--	0.000	--	pass
9	--	--	--	--	0.000	--	pass
10	--	--	--	--	0.000	--	pass
11	--	--	--	--	0.000	--	pass
12	69013	63206	4708452	-5807	-0.123	--	pass

Summary of Interference Analysis for Worst-Case Scenarios							
Facility Number	Interference Population Before Analysis	Interference Population After Analysis	Baseline Population	Net Change in Interference	Percent of Baseline	Permissible Percent of Baseline	Result
13	--	--	--	--	0.000	--	pass
14	--	--	--	--	0.000	--	pass
15	--	--	--	--	0.000	--	pass
16	--	--	--	--	0.000	--	pass
17	--	--	--	--	0.000	--	pass
18	--	--	--	--	0.000	--	pass
19	--	--	--	--	0.000	--	pass
20	903343	904555	3877046	1212	0.031	--	pass
21	729147	729147	3877046	0	0.000	--	pass
22	--	--	--	--	0.000	--	pass
23	--	--	--	--	0.000	--	pass
24	--	--	--	--	0.000	--	pass
25	--	--	--	--	0.000	--	pass
26	--	--	--	--	0.000	--	pass
27	--	--	--	--	0.000	--	pass

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Transmitting Antenna Manufacturer's  
Azimuthal Plane and Vertical Plane Pattern Data

(four pages follow)



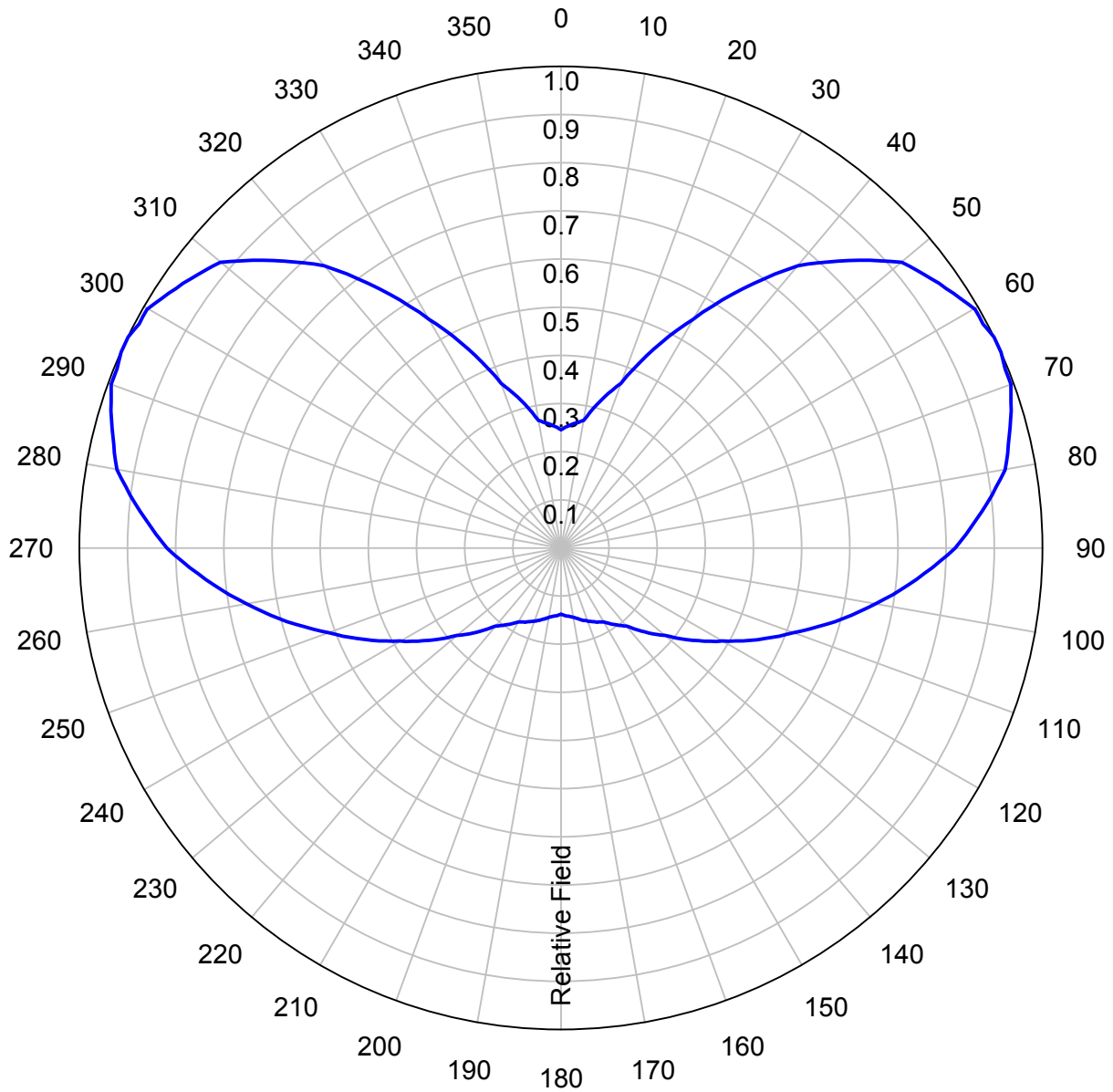


# ANDREW®

## AZIMUTH PATTERN

Type: ALP-BR

	Numeric	dBd
Directivity:	<u>2.75</u>	<u>4.39</u>
Peak(s) at:	<u></u>	
Polarization:	<u>Horizontal</u>	
Channel:	<u>32</u>	
Location:	<u></u>	
Note:	<u></u>	



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10500 W. 153rd Street  
Orland Park, Illinois U.S.A 60462

**ANDREW®****AZIMUTH TABULATED DATA**Type: ALP-BRPolarization: Horizontal

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0	0.246	-12.18	92	0.787	-2.08	184	0.141	-17.02	276	0.889	-1.02
2	0.251	-12.01	94	0.756	-2.43	186	0.142	-16.95	278	0.912	-0.80
4	0.255	-11.87	96	0.726	-2.78	188	0.144	-16.83	280	0.936	-0.57
6	0.260	-11.70	98	0.695	-3.16	190	0.146	-16.71	282	0.948	-0.46
8	0.264	-11.57	100	0.664	-3.56	192	0.149	-16.54	284	0.959	-0.36
10	0.269	-11.40	102	0.634	-3.96	194	0.152	-16.36	286	0.971	-0.26
12	0.288	-10.81	104	0.604	-4.38	196	0.155	-16.19	288	0.982	-0.16
14	0.307	-10.26	106	0.573	-4.84	198	0.158	-16.03	290	0.994	-0.05
16	0.326	-9.74	108	0.543	-5.30	200	0.161	-15.86	292	0.994	-0.05
18	0.345	-9.24	110	0.513	-5.80	202	0.164	-15.70	294	1.000	0.00
20	0.364	-8.78	112	0.488	-6.23	204	0.167	-15.55	296	1.000	0.00
22	0.401	-7.94	114	0.462	-6.71	206	0.171	-15.34	298	0.992	-0.07
24	0.438	-7.17	116	0.437	-7.19	208	0.174	-15.19	300	0.992	-0.07
26	0.475	-6.47	118	0.411	-7.72	210	0.177	-15.04	302	0.978	-0.19
28	0.512	-5.81	120	0.386	-8.27	212	0.184	-14.70	304	0.964	-0.32
30	0.549	-5.21	122	0.365	-8.75	214	0.191	-14.38	306	0.951	-0.44
32	0.592	-4.55	124	0.344	-9.27	216	0.197	-14.11	308	0.937	-0.57
34	0.635	-3.94	126	0.324	-9.79	218	0.204	-13.81	310	0.923	-0.70
36	0.679	-3.36	128	0.303	-10.37	220	0.211	-13.51	312	0.891	-1.00
38	0.722	-2.83	130	0.282	-11.00	222	0.225	-12.96	314	0.860	-1.31
40	0.765	-2.33	132	0.268	-11.44	224	0.239	-12.43	316	0.828	-1.64
42	0.797	-1.97	134	0.254	-11.90	226	0.254	-11.90	318	0.797	-1.97
44	0.828	-1.64	136	0.239	-12.43	228	0.268	-11.44	320	0.765	-2.33
46	0.860	-1.31	138	0.225	-12.96	230	0.282	-11.00	322	0.722	-2.83
48	0.891	-1.00	140	0.211	-13.51	232	0.303	-10.37	324	0.679	-3.36
50	0.923	-0.70	142	0.204	-13.81	234	0.324	-9.79	326	0.635	-3.94
52	0.937	-0.57	144	0.197	-14.11	236	0.344	-9.27	328	0.592	-4.55
54	0.951	-0.44	146	0.191	-14.38	238	0.365	-8.75	330	0.549	-5.21
56	0.964	-0.32	148	0.184	-14.70	240	0.386	-8.27	332	0.512	-5.81
58	0.978	-0.19	150	0.177	-15.04	242	0.411	-7.72	334	0.475	-6.47
60	0.992	-0.07	152	0.174	-15.19	244	0.437	-7.19	336	0.438	-7.17
62	0.992	-0.07	154	0.171	-15.34	246	0.462	-6.71	338	0.401	-7.94
64	1.000	0.00	156	0.167	-15.55	248	0.488	-6.23	340	0.364	-8.78
66	1.000	0.00	158	0.164	-15.70	250	0.513	-5.80	342	0.345	-9.24
68	0.994	-0.05	160	0.161	-15.86	252	0.543	-5.30	344	0.326	-9.74
70	0.994	-0.05	162	0.158	-16.03	254	0.573	-4.84	346	0.307	-10.26
72	0.982	-0.16	164	0.155	-16.19	256	0.604	-4.38	348	0.288	-10.81
74	0.971	-0.26	166	0.152	-16.36	258	0.634	-3.96	350	0.269	-11.40
76	0.959	-0.36	168	0.149	-16.54	260	0.664	-3.56	352	0.264	-11.57
78	0.948	-0.46	170	0.146	-16.71	262	0.695	-3.16	354	0.260	-11.70
80	0.936	-0.57	172	0.144	-16.83	264	0.726	-2.78	356	0.255	-11.87
82	0.912	-0.80	174	0.142	-16.95	266	0.756	-2.43	358	0.251	-12.01
84	0.889	-1.02	176	0.141	-17.02	268	0.787	-2.08	360	0.246	-12.18
86	0.865	-1.26	178	0.139	-17.14	270	0.818	-1.74			
88	0.842	-1.49	180	0.137	-17.27	272	0.842	-1.49			
90	0.818	-1.74	182	0.139	-17.14	274	0.865	-1.26			



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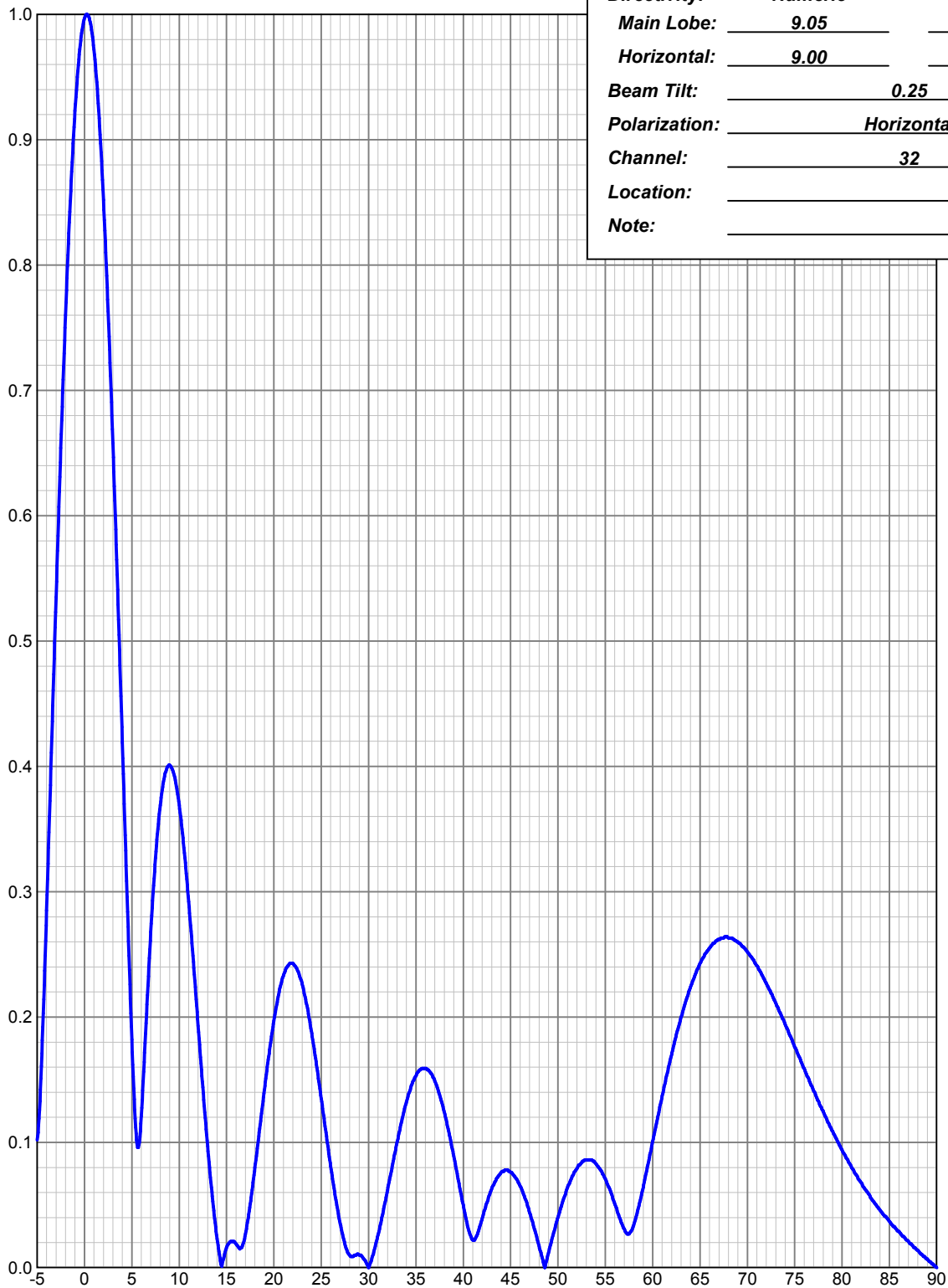


**ANDREW®**

## ELEVATION PATTERN

Type:	ALP8L1	
Directivity:	Numeric	dBd
Main Lobe:	9.05	9.57
Horizontal:	9.00	9.54
Beam Tilt:	0.25	
Polarization:	Horizontal	
Channel:	32	
Location:		
Note:		

Relative Field



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Orland Park, Illinois U.S.A 60462

**ANDREW®****ELEVATION TABULATED DATA**Type: ALP8L1Polarization: Horizontal

<i>Angle</i>	<i>Field</i>	<i>dB</i>	<i>Angle</i>	<i>Field</i>	<i>dB</i>	<i>Angle</i>	<i>Field</i>	<i>dB</i>	<i>Angle</i>	<i>Field</i>	<i>dB</i>
-5.00	0.102	-19.83	6.50	0.195	-14.20	42.00	0.039	-28.18	88.00	0.014	-37.08
-4.75	0.126	-17.99	6.75	0.232	-12.67	43.00	0.063	-24.01	89.00	0.007	-43.10
-4.50	0.171	-15.34	7.00	0.268	-11.44	44.00	0.076	-22.38	90.00	0.000	0.00
-4.25	0.225	-12.94	7.25	0.299	-10.49	45.00	0.076	-22.38			
-4.00	0.285	-10.90	7.50	0.327	-9.71	46.00	0.065	-23.74			
-3.75	0.348	-9.18	7.75	0.350	-9.12	47.00	0.044	-27.13			
-3.50	0.411	-7.72	8.00	0.369	-8.66	48.00	0.017	-35.39			
-3.25	0.474	-6.49	8.25	0.384	-8.32	49.00	0.012	-38.42			
-3.00	0.535	-5.43	8.50	0.394	-8.09	50.00	0.040	-27.96			
-2.75	0.595	-4.50	8.75	0.400	-7.97	51.00	0.064	-23.88			
-2.50	0.654	-3.69	9.00	0.401	-7.94	52.00	0.079	-22.05			
-2.25	0.708	-2.99	9.25	0.398	-8.00	53.00	0.086	-21.31			
-2.00	0.760	-2.38	9.50	0.392	-8.13	54.00	0.083	-21.62			
-1.75	0.808	-1.85	9.75	0.382	-8.36	55.00	0.071	-22.97			
-1.50	0.851	-1.40	10.00	0.369	-8.66	56.00	0.051	-25.85			
-1.25	0.889	-1.02	11.00	0.292	-10.69	57.00	0.031	-30.17			
-1.00	0.923	-0.70	12.00	0.193	-14.29	58.00	0.034	-29.37			
-0.75	0.950	-0.45	13.00	0.097	-20.26	59.00	0.064	-23.88			
-0.50	0.972	-0.25	14.00	0.023	-32.77	60.00	0.101	-19.91			
-0.25	0.988	-0.11	15.00	0.016	-35.92	61.00	0.137	-17.27			
0.00	0.997	-0.03	16.00	0.019	-34.42	62.00	0.170	-15.39			
0.25	1.000	0.00	17.00	0.027	-31.37	63.00	0.200	-13.98			
0.50	0.997	-0.03	18.00	0.080	-21.94	64.00	0.224	-13.00			
0.75	0.988	-0.11	19.00	0.142	-16.95	65.00	0.243	-12.29			
1.00	0.972	-0.25	20.00	0.197	-14.11	66.00	0.255	-11.87			
1.25	0.950	-0.44	21.00	0.233	-12.65	67.00	0.262	-11.63			
1.50	0.923	-0.70	22.00	0.243	-12.29	68.00	0.263	-11.60			
1.75	0.890	-1.01	23.00	0.226	-12.92	69.00	0.260	-11.70			
2.00	0.852	-1.39	24.00	0.187	-14.56	70.00	0.252	-11.97			
2.25	0.810	-1.83	25.00	0.135	-17.39	71.00	0.241	-12.36			
2.50	0.763	-2.35	26.00	0.081	-21.83	72.00	0.227	-12.88			
2.75	0.712	-2.96	27.00	0.035	-29.12	73.00	0.211	-13.51			
3.00	0.658	-3.64	28.00	0.010	-40.00	74.00	0.194	-14.24			
3.25	0.601	-4.43	29.00	0.010	-40.00	75.00	0.176	-15.09			
3.50	0.541	-5.34	30.00	0.000	0.00	76.00	0.159	-15.97			
3.75	0.481	-6.37	31.00	0.026	-31.70	77.00	0.141	-17.02			
4.00	0.419	-7.56	32.00	0.062	-24.15	78.00	0.125	-18.06			
4.25	0.357	-8.93	33.00	0.100	-20.00	79.00	0.109	-19.25			
4.50	0.296	-10.57	34.00	0.132	-17.59	80.00	0.094	-20.54			
4.75	0.237	-12.49	35.00	0.153	-16.31	81.00	0.080	-21.94			
5.00	0.182	-14.80	36.00	0.159	-15.97	82.00	0.068	-23.35			
5.25	0.135	-17.43	37.00	0.149	-16.54	83.00	0.056	-25.04			
5.50	0.102	-19.83	38.00	0.124	-18.13	84.00	0.046	-26.74			
5.75	0.098	-20.18	39.00	0.089	-21.01	85.00	0.037	-28.64			
6.00	0.121	-18.34	40.00	0.050	-26.02	86.00	0.029	-30.75			
6.25	0.157	-16.11	41.00	0.022	-33.15	87.00	0.021	-33.56			



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