

TECHNICAL EXHIBIT  
DISPLACEMENT RELIEF  
APPLICATION FOR MODIFICATION OF  
CONSTRUCTION PERMIT  
(FCC FILE NO. BPTVL-20010404ABQ)  
CLASS A STATION W52CE  
FACILITY ID 52077  
CLARKS SUMMIT, PENNSYLVANIA  
CH 24 17.5 KW (MAX-DA)

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of a displacement relief application for modification of authorized construction permit for Class A station W52CE at Clarks Summit, Pennsylvania (Facility ID: 52077; File No. BPTVL-20010404ABQ). Specifically, this displacement relief application proposes a change in channel, an increase in effective radiated power (ERP), and a change from the currently authorized directional antenna system (Scala CL-713, Antenna ID 20786) to an Andrew ALP16L2-HSN (Antenna ID 16528) directional antenna system to be oriented at 15 degrees true. No other changes are proposed including site, radiation center above mean sea level (RCAMSL), or community of license (Clarks Summit).

Displacement Relief Eligibility

Studies indicate that W52CE's current authorized facility on channel 9 is located 99.8 kilometers from the authorized, co-channel facility of DTV station WBPH-DT at Bethlehem, PA (BMPCDT-20030522ADF). According to Section 73.3572(a)(4)(iii) of the FCC's rules, a Class A TV station is eligible for displacement if it is located within 260 kilometers (159 miles) of a co-channel DTV facility or allotment. Therefore, it is believed that W52CE is eligible for displacement relief.

Figure 1 depicts the authorized and herein proposed 68 and 74 dBu contours, respectively, for W52CE. As indicated, the proposed 74 dBu contour encompasses the majority of the authorized 68 dBu contour.

### TV Broadcast Analog Protection

A study has been conducted using the provisions of Section 74.705 which indicate that the proposed W52CE operation will not create prohibited interference to other existing, authorized or proposed TV broadcast analog (NTSC) full-power stations, with the exception of the licensed co-channel operations of WEDH at Hartford, CT (BLET-341) and WCNY at Syracuse, NY (BLET-20030411ABZ). Therefore, waiver of Section 74.705 is requested with respect to WEDH and WCNY. Based on the provisions of the OET-69 Bulletin as permitted by FCC rules [Section 74.705(e)], it is believed that W52CE's proposed operation complies with the FCC's interference criteria towards the licensed operations of WEDH and WCNY. Specifically, calculations have been made using the procedures outlined in the FCC's OET-69 Bulletin and a 2 square kilometer grid. The results of the OET Bulletin No. 69 are tabulated on Figure 2 and, as indicated, the proposal complies with the FCC's 0.5% interference threshold criteria to WEDH and WCNY.<sup>1</sup>

### DTV Station and DTV Table of Allotments Protection

Calculations based on OET Bulletin No. 69 indicate that the proposed W52CE operation on channel 24 complies with the FCC's 0.5% interference threshold criteria to all allotted, proposed or actual DTV operating facilities on channels 23, 24, and 25. The results are tabulated in Figure 2.

### Low Power TV, TV Translator, Class A and Digital Class A Station Protection

A study has been conducted which indicates that the W52CE proposal will not create prohibited interference to other existing, authorized or proposed LPTV, TV Translator and Class A stations, with the exception of the licensed co-channel LPTV operations of W24BB at East Stroudsburg, Pennsylvania (BLTTL-

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<sup>1</sup> The du Treil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and 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. An Alpha based processor computer system was employed. The results have been found to be in very close agreement with the results of the FCC implementation of OET Bulletin 69.

19911219JM) and W24BL at Pottsville, Pennsylvania (BLTT-19920218JP). However, based on the provisions of the OET-69 Bulletin as permitted by FCC rules [Section 74.707(e)] it is believed that W52CE's proposed operation complies with the FCC's interference criteria towards these operations. Specifically, calculations have been made using the procedures outlined in the FCC's OET-69 Bulletin and a 2 square kilometer grid. The results of the OET Bulletin No. 69 are tabulated on Figure 2 and, as indicated, the W52CE proposal complies with the FCC's 0.5% interference threshold criteria towards W24BB and W24BL.

#### Land Mobile Station Protection

The proposed W52CE operation does not cause interference to land mobile radio stations (LMRS).

#### Environmental Considerations

The proposed W52CE television facilities were evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation". The calculated power density at the base of the tower was calculated using the appropriate equation of the Bulletin.

Figure 3 depicts the horizontal and vertical relative field pattern data for the proposed directional antenna. Using a worst-case vertical relative field value of 0.25 towards the tower base (see sheet 4 of Figure 3), a maximum visual effective radiated power of 17.5 kilowatts and 22 percent aural power, the calculated power density at 2 meters above ground level at the base of the tower is 0.0029 milliwatts per square centimeter ( $\text{mW}/\text{cm}^2$ ), or 0.8% percent of the Commission's recommended limit applicable to general population/uncontrolled exposure areas ( $0.36 \text{ mW}/\text{cm}^2$  for TV channel 24). Therefore, based on the responsibility threshold of 5%, the W52CE proposal will comply with the RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter the restricted area or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

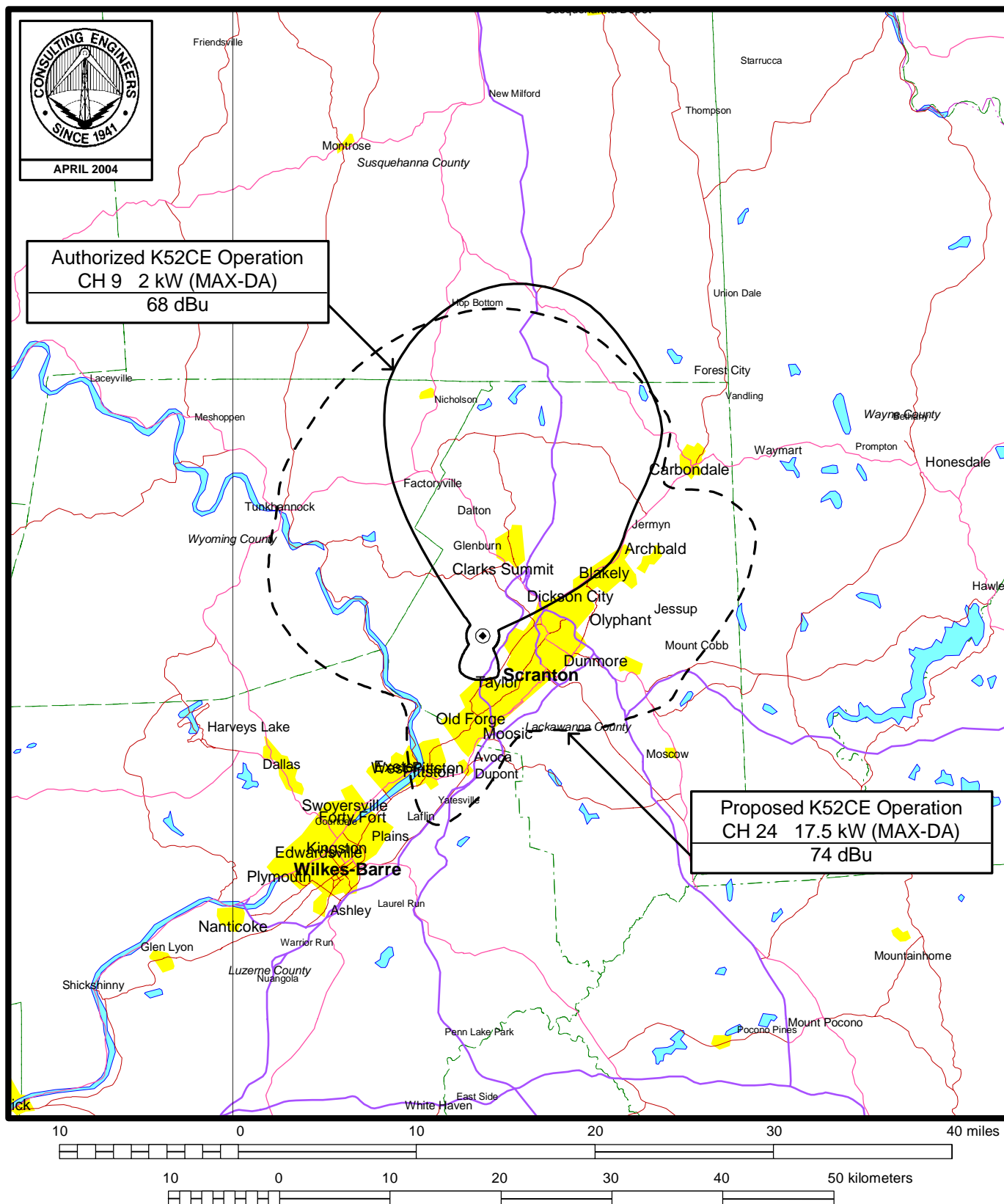
It is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be provided to the FCC by the tower owner as part of the tower registration process.

W. Jeffrey Reynolds

du Treil, Lundin & Rackley, Inc.  
201 Fletcher Avenue  
Sarasota, Florida 34237  
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JEFF@DLR.COM

April 13, 2004

Figure 1



## FCC PREDICTED COVERAGE CONTOURS

CLASS A STATION K52CE  
CLARKS SUMMIT, PENNSYLVANIA  
CH 24 17.5 KW (MAX-DA)

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

**OET-69 DTV, FULL-SERVICE NTSC AND LPTV INTERFERENCE CAUSED STUDY**

CELL SIZE : 2.00

Using offset in determining thresholds

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WEDH 41-46-27 072-48-20 24(Z) 813.000 kw 359 m 50.0 % 62.7 dBu  
HARTFORD CT 11674 2651 FCC NTSC BL: 3009464 FCC IX POP%:11.0  
LIC BLET341

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	14523.50	3009464
not affected by terrain losses	12734.69	2817257

\*\*\*\*\*

W52CE 41-26-09 075-43-46 24(Z) 17.500 kw 719 m DA 10.0 % 72.7  
CLARKS SUMMIT PA

PROPOSED

1.00	0.97	0.91	0.81	0.71	0.61	0.52	0.44	0.37	0.32	0.27	0.22
0.17	0.12	0.09	0.10	0.15	0.20	0.24	0.20	0.15	0.10	0.09	0.12
0.17	0.22	0.27	0.32	0.37	0.44	0.52	0.61	0.71	0.81	0.91	0.97

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 45.00

	Area	Pop
Interference	0	0

\*\*\*\*\*

NEW 42-11-46 078-03-59 24(N) 200.000 kw 1102 m DA 90.0 % 39.7 dBu  
ARCADE NY  
APP BPRM20000717AFG

0.94	0.85	0.75	0.63	0.52	0.41	0.30	0.22	0.17	0.10	0.05	0.02
0.02	0.03	0.05	0.06	0.08	0.07	0.05	0.03	0.02	0.04	0.08	0.13
0.17	0.22	0.30	0.41	0.52	0.64	0.75	0.85	0.93	0.99	1.00	0.98

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	21772.74	1317000
not affected by terrain losses	19099.46	1192239

\*\*\*\*\*

W52CE 41-26-09 075-43-46 24(Z) 17.500 kw 719 m DA 10.0 % 72.7  
CLARKS SUMMIT PA

PROPOSED

1.00	0.97	0.91	0.81	0.71	0.61	0.52	0.44	0.37	0.32	0.27	0.22
0.17	0.12	0.09	0.10	0.15	0.20	0.24	0.20	0.15	0.10	0.09	0.12
0.17	0.22	0.27	0.32	0.37	0.44	0.52	0.61	0.71	0.81	0.91	0.97

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

	Area	Pop
Interference	24.16	0

\*\*\*\*\*

DWNYET 40-44-54 073-59-10 24(0) 80.700 kw 408 m DA 90.0 % 39.7 dBu  
NEW YORK NY 18412 16618 DTVSERVICE:16618000 NTSCSERVICE:16695000  
DTVALT DTV ALLOTMENT

0.91	0.90	0.91	0.93	0.95	0.97	0.97	0.98	0.95	0.89	0.80	0.65
0.49	0.32	0.22	0.19	0.22	0.26	0.29	0.28	0.26	0.23	0.23	0.30
0.42	0.58	0.73	0.86	0.95	0.99	1.00	0.99	0.98	0.95	0.93	0.92

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	20484.62	17047687
not affected by terrain losses	19117.36	16841052

\*\*\*\*\*

W52CE 41-26-09 075-43-46 24(Z) 17.500 kw 719 m DA 10.0 % 72.7  
CLARKS SUMMIT PA  
PROPOSED

1.00	0.97	0.91	0.81	0.71	0.61	0.52	0.44	0.37	0.32	0.27	0.22
0.17	0.12	0.09	0.10	0.15	0.20	0.24	0.20	0.15	0.10	0.09	0.12
0.17	0.22	0.27	0.32	0.37	0.44	0.52	0.61	0.71	0.81	0.91	0.97

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

	Area	Pop
Interference	8.07	0

\*\*\*\*\*

WNYE-T 40-44-54 073-59-10 24(N) 200.000 kw 423.5 m DA 90.0 % 39.7 dBu  
NEW YORK NY 18412 16618 DTVSERVICE:16618000 NTSCSERVICE:16695000  
CP BPEDT19991110AAQ

0.86	0.72	0.59	0.50	0.47	0.50	0.59	0.72	0.86	0.96	1.00	0.96
0.86	0.72	0.59	0.50	0.47	0.50	0.59	0.72	0.86	0.96	1.00	0.96
0.86	0.72	0.59	0.50	0.47	0.50	0.59	0.72	0.86	0.96	1.00	0.96

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	25492.01	17047209
not affected by terrain losses	24196.42	16735656

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W52CE 41-26-09 075-43-46 24(Z) 17.500 kw 719 m DA 10.0 % 72.7  
CLARKS SUMMIT PA  
PROPOSED

1.00	0.97	0.91	0.81	0.71	0.61	0.52	0.44	0.37	0.32	0.27	0.22
0.17	0.12	0.09	0.10	0.15	0.20	0.24	0.20	0.15	0.10	0.09	0.12
0.17	0.22	0.27	0.32	0.37	0.44	0.52	0.61	0.71	0.81	0.91	0.97

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

	Area	Pop
Interference	12.11	0

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WCNY-T 42-56-42 076-07-07 24(+) 1875.000 kw 689 m 50.0 % 62.7 dBu  
SYRACUSE NY 21801 1245 FCC NTSC BL: 1379573 FCC IX POP%: 0.6  
LIC BLET20030411ABZ

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	22313.06	1329573
not affected by terrain losses	20200.29	1249987

\*\*\*\*\*

W52CE 41-26-09 075-43-46 24(Z) 17.500 kw 719 m DA 10.0 % 72.7  
CLARKS SUMMIT PA  
PROPOSED

1.00	0.97	0.91	0.81	0.71	0.61	0.52	0.44	0.37	0.32	0.27	0.22
0.17	0.12	0.09	0.10	0.15	0.20	0.24	0.20	0.15	0.10	0.09	0.12
0.17	0.22	0.27	0.32	0.37	0.44	0.52	0.61	0.71	0.81	0.91	0.97

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 28.00

	Area	Pop
Interference	290.30	3191

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WATM-T 40-34-06 078-26-38 24(N) 1000.000 kw 835.7 m DA 90.0 % 39.7 dBu  
ALTOONA PA 7008 344 DTVSERVICE: 344000 NTSCSERVICE: 289000  
CP BPCDT19991101AGQ

0.58	0.67	0.76	0.85	0.92	0.97	1.00	0.99	0.96	0.91	0.83	0.75
0.65	0.57	0.49	0.42	0.35	0.30	0.25	0.21	0.21	0.24	0.29	0.34
0.37	0.36	0.33	0.28	0.23	0.20	0.22	0.26	0.31	0.37	0.43	0.50

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	24282.64	384720
not affected by terrain losses	20324.91	296461

\*\*\*\*\*

W52CE 41-26-09 075-43-46 24(Z) 17.500 kw 719 m DA 10.0 % 72.7  
CLARKS SUMMIT PA  
PROPOSED

1.00	0.97	0.91	0.81	0.71	0.61	0.52	0.44	0.37	0.32	0.27	0.22
0.17	0.12	0.09	0.10	0.15	0.20	0.24	0.20	0.15	0.10	0.09	0.12
0.17	0.22	0.27	0.32	0.37	0.44	0.52	0.61	0.71	0.81	0.91	0.97

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

	Area	Pop
Interference	4.00	0



\*\*\*\*\*

W24BB 41-01-36 075-30-17 24(-) 53.500 kw 694 m DA 50.0 % 72.7 dBu

EAST STROUDSBURG PA

LIC BLTTL19911219JM

1.00 0.96 0.97 0.99 0.89 0.69 0.40 0.15 0.03 0.03 0.03 0.03

0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03

0.03 0.03 0.03 0.03 0.03 0.15 0.40 0.69 0.89 0.99 0.97 0.96

Ref Az: 80.0

Using DEFAULT vertical antenna pattern

Area Pop

within Noise Limited Contour 1033.333 102895

not affected by terrain losses 695.5900 58617

\*\*\*\*\*

W52CE 41-26-09 075-43-46 24(Z) 17.500 kw 719 m DA 10.0 % 72.7

CLARKS SUMMIT PA

PROPOSED

1.00 0.97 0.91 0.81 0.71 0.61 0.52 0.44 0.37 0.32 0.27 0.22

0.17 0.12 0.09 0.10 0.15 0.20 0.24 0.20 0.15 0.10 0.09 0.12

0.17 0.22 0.27 0.32 0.37 0.44 0.52 0.61 0.71 0.81 0.91 0.97

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 28.00

Interference Area Pop  
4.0 351

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W24BL 40-40-38 076-12-04 24(Z) 0.640 kw 416 m DA 50.0 % 72.7 dBu

POTTSVILLE ETC. PA

LIC BLTT19920218JP

1.00 0.94 0.83 0.80 0.93 1.00 0.98 0.92 0.83 0.71 0.58 0.41

0.14 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02

0.13 0.40 0.56 0.71 0.82 0.92 0.98 0.98 0.89 0.78 0.83 0.95

Ref Az: 340.0

Using DEFAULT vertical antenna pattern

Area Pop

within Noise Limited Contour 83.86952 33964

not affected by terrain losses 75.88195 33769

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W52CE 41-26-09 075-43-46 24(Z) 17.500 kw 719 m DA 10.0 % 72.7

CLARKS SUMMIT PA

PROPOSED

1.00 0.97 0.91 0.81 0.71 0.61 0.52 0.44 0.37 0.32 0.27 0.22

0.17 0.12 0.09 0.10 0.15 0.20 0.24 0.20 0.15 0.10 0.09 0.12

0.17 0.22 0.27 0.32 0.37 0.44 0.52 0.61 0.71 0.81 0.91 0.97

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 45.00

Interference Area Pop  
0 0

Summary of Calculations

Facility	Channel	Type	Baseline	Permissible	IX	%Base
WEDH, HARTFORD, CT	24	TV	3009464	0.5	0	0.00
NEW, ARCADE, NY	24	DTV	1317000	0.5	0	0.00
DWNYET, NEW YORK, NY	24	DTV	16695158	0.5	0	0.00
WNYE-T, NEW YORK, NY	24	DTV	16695158	0.5	0	0.00
WCNY-T, SYRACUSE, NY	24	TV	1327032	0.5	3191	0.24
WATM-T, ALTOONA, PA	24	DTV	384720	0.5	0	0.00
W24BB, EAST STROUDSBURG	24	TV	102895	0.5	351	0.34
W24BL, POTTSVILLE ETC.	24	TV	33964	0.5	0	0.00



# ANDREW®

## AZIMUTH PATTERN

Type: ALP-N

Directivity: Numeric 3.77 dBd 5.76

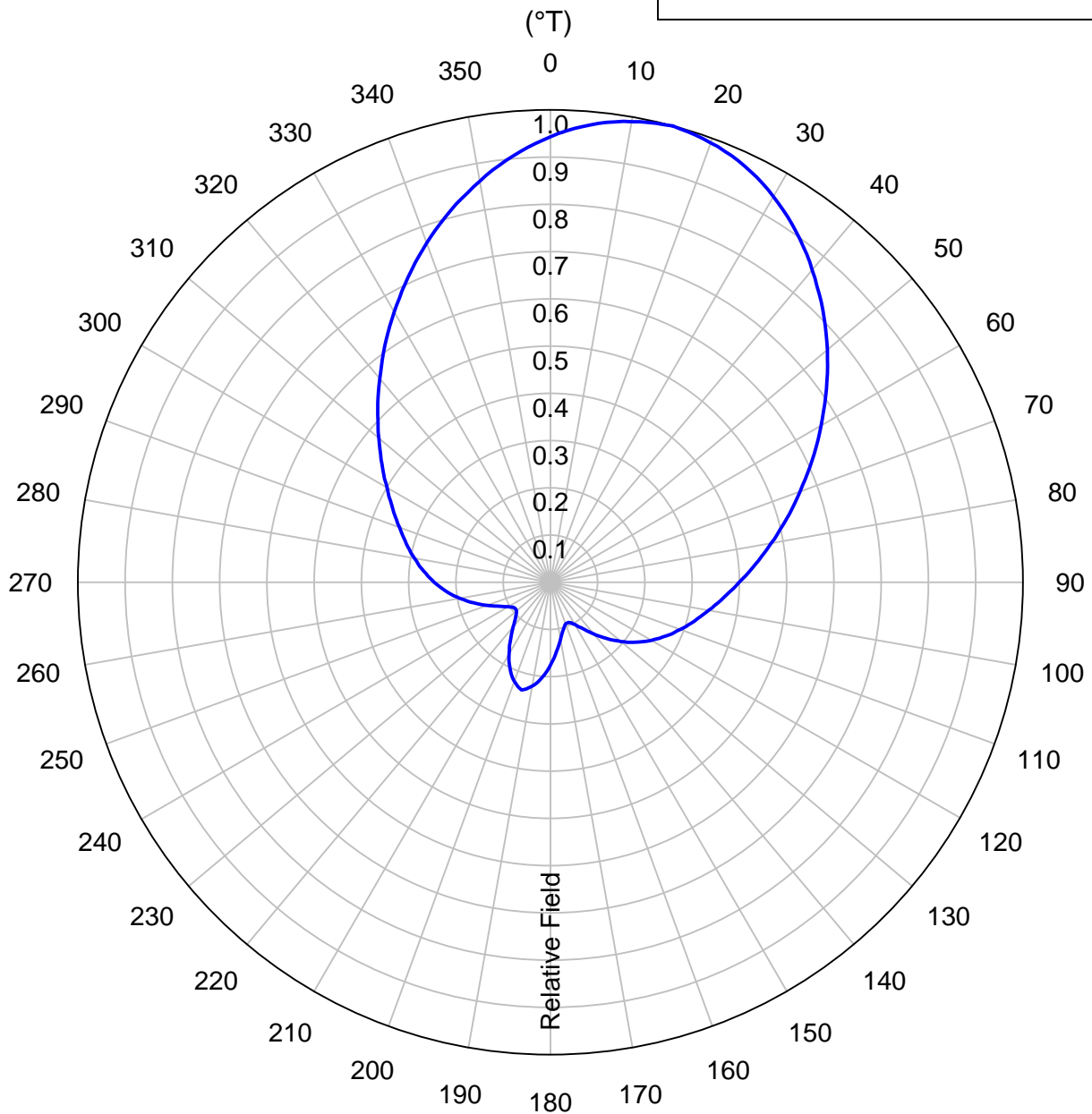
Peak(s) at: \_\_\_\_\_

Polarization: Horizontal

Channel: 24

Location: \_\_\_\_\_

Note: \_\_\_\_\_



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

Figure 3 - Sheet 1 of 4

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

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Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0	0.943	-0.51	92	0.387	-8.25	184	0.197	-14.11	276	0.274	-11.24
2	0.956	-0.39	94	0.374	-8.54	186	0.207	-13.68	278	0.283	-10.96
4	0.967	-0.29	96	0.363	-8.80	188	0.216	-13.31	280	0.292	-10.69
6	0.977	-0.20	98	0.351	-9.09	190	0.223	-13.03	282	0.302	-10.40
8	0.984	-0.14	100	0.340	-9.37	192	0.229	-12.80	284	0.311	-10.14
10	0.990	-0.09	102	0.330	-9.63	194	0.234	-12.62	286	0.320	-9.90
12	0.995	-0.04	104	0.320	-9.90	196	0.234	-12.62	288	0.330	-9.63
14	0.998	-0.02	106	0.311	-10.14	198	0.229	-12.80	290	0.340	-9.37
16	0.998	-0.02	108	0.302	-10.40	200	0.223	-13.03	292	0.351	-9.09
18	0.995	-0.04	110	0.292	-10.69	202	0.216	-13.31	294	0.363	-8.80
20	0.990	-0.09	112	0.283	-10.96	204	0.207	-13.68	296	0.374	-8.54
22	0.984	-0.14	114	0.274	-11.24	206	0.197	-14.11	298	0.387	-8.25
24	0.977	-0.20	116	0.264	-11.57	208	0.187	-14.56	300	0.399	-7.98
26	0.967	-0.29	118	0.255	-11.87	210	0.175	-15.14	302	0.414	-7.66
28	0.956	-0.39	120	0.246	-12.18	212	0.164	-15.70	304	0.428	-7.37
30	0.943	-0.51	122	0.236	-12.54	214	0.153	-16.31	306	0.443	-7.07
32	0.929	-0.64	124	0.226	-12.92	216	0.142	-16.95	308	0.458	-6.78
34	0.914	-0.78	126	0.216	-13.31	218	0.132	-17.59	310	0.474	-6.48
36	0.898	-0.93	128	0.206	-13.72	220	0.123	-18.20	312	0.491	-6.18
38	0.881	-1.10	130	0.195	-14.20	222	0.114	-18.86	314	0.508	-5.88
40	0.862	-1.29	132	0.184	-14.70	224	0.107	-19.41	316	0.526	-5.58
42	0.843	-1.48	134	0.174	-15.19	226	0.102	-19.83	318	0.544	-5.29
44	0.825	-1.67	136	0.163	-15.76	228	0.097	-20.26	320	0.562	-5.01
46	0.805	-1.88	138	0.153	-16.31	230	0.094	-20.54	322	0.581	-4.72
48	0.785	-2.10	140	0.143	-16.89	232	0.093	-20.63	324	0.601	-4.42
50	0.765	-2.33	142	0.133	-17.52	234	0.093	-20.63	326	0.621	-4.14
52	0.744	-2.57	144	0.124	-18.13	236	0.095	-20.45	328	0.641	-3.86
54	0.723	-2.82	146	0.116	-18.71	238	0.099	-20.09	330	0.661	-3.60
56	0.702	-3.07	148	0.110	-19.17	240	0.103	-19.74	332	0.681	-3.34
58	0.681	-3.34	150	0.103	-19.74	242	0.110	-19.17	334	0.702	-3.07
60	0.661	-3.60	152	0.099	-20.09	244	0.116	-18.71	336	0.723	-2.82
62	0.641	-3.86	154	0.095	-20.45	246	0.124	-18.13	338	0.744	-2.57
64	0.621	-4.14	156	0.093	-20.63	248	0.133	-17.52	340	0.765	-2.33
66	0.601	-4.42	158	0.093	-20.63	250	0.143	-16.89	342	0.785	-2.10
68	0.581	-4.72	160	0.094	-20.54	252	0.153	-16.31	344	0.805	-1.88
70	0.562	-5.01	162	0.097	-20.26	254	0.163	-15.76	346	0.825	-1.67
72	0.544	-5.29	164	0.102	-19.83	256	0.174	-15.19	348	0.843	-1.48
74	0.526	-5.58	166	0.107	-19.41	258	0.184	-14.70	350	0.862	-1.29
76	0.508	-5.88	168	0.114	-18.86	260	0.195	-14.20	352	0.881	-1.10
78	0.491	-6.18	170	0.123	-18.20	262	0.206	-13.72	354	0.898	-0.93
80	0.474	-6.48	172	0.132	-17.59	264	0.216	-13.31	356	0.914	-0.78
82	0.458	-6.78	174	0.142	-16.95	266	0.226	-12.92	358	0.929	-0.64
84	0.443	-7.07	176	0.153	-16.31	268	0.236	-12.54	360	0.943	-0.51
86	0.428	-7.37	178	0.164	-15.70	270	0.246	-12.18			
88	0.414	-7.66	180	0.175	-15.14	272	0.255	-11.87			
90	0.399	-7.98	182	0.187	-14.56	274	0.264	-11.57			

\*Degrees True



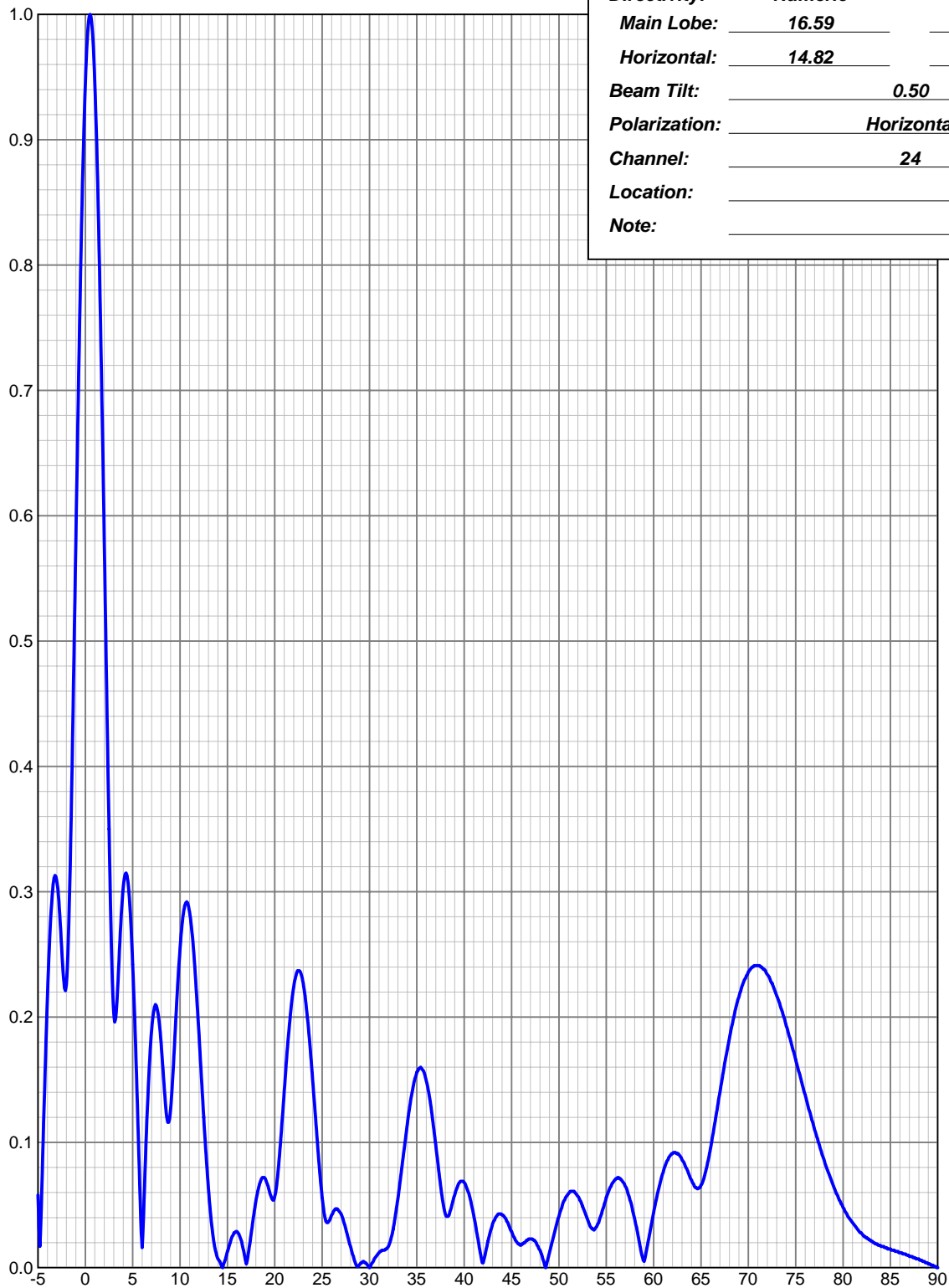
ANDREW CORPORATION  
10500 W. 153rd Street  
Orland Park, Illinois U.S.A 60462

Figure 3 - Sheet 2 of 4

4.5.04

**ANDREW®****ELEVATION PATTERN**

Type:	ALP16L2	
Directivity:	Numeric	dBd
Main Lobe:	16.59	12.20
Horizontal:	14.82	11.71
Beam Tilt:	0.50	
Polarization:	Horizontal	
Channel:	24	
Location:		
Note:		

**Relative Field**

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**ANDREW®****ELEVATION TABULATED DATA**Type: ALP16L2Polarization: Horizontal

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-5.00	0.058	-24.73	6.50	0.118	-18.56	42.00	0.004	-47.96	88.00	0.007	-43.10
-4.75	0.026	-31.70	6.75	0.160	-15.92	43.00	0.035	-29.12	89.00	0.003	-50.46
-4.50	0.089	-21.01	7.00	0.190	-14.42	44.00	0.042	-27.54	90.00	0.000	0.00
-4.25	0.156	-16.14	7.25	0.206	-13.72	45.00	0.029	-30.75			
-4.00	0.217	-13.27	7.50	0.209	-13.60	46.00	0.018	-34.89			
-3.75	0.265	-11.55	7.75	0.199	-14.02	47.00	0.023	-32.77			
-3.50	0.297	-10.54	8.00	0.179	-14.94	48.00	0.014	-37.08			
-3.25	0.312	-10.12	8.25	0.153	-16.33	49.00	0.012	-38.42			
-3.00	0.308	-10.23	8.50	0.127	-17.92	50.00	0.041	-27.74			
-2.75	0.287	-10.84	8.75	0.116	-18.71	51.00	0.059	-24.58			
-2.50	0.255	-11.87	9.00	0.126	-17.99	52.00	0.057	-24.88			
-2.25	0.227	-12.88	9.25	0.155	-16.19	53.00	0.039	-28.18			
-2.00	0.226	-12.92	9.50	0.191	-14.38	54.00	0.033	-29.63			
-1.75	0.274	-11.24	9.75	0.226	-12.94	55.00	0.056	-25.04			
-1.50	0.359	-8.90	10.00	0.255	-11.87	56.00	0.071	-22.97			
-1.25	0.467	-6.62	11.00	0.284	-10.93	57.00	0.065	-23.74			
-1.00	0.580	-4.73	12.00	0.186	-14.61	58.00	0.039	-28.18			
-0.75	0.693	-3.19	13.00	0.063	-24.01	59.00	0.005	-46.02			
-0.50	0.794	-2.00	14.00	0.007	-43.10	60.00	0.044	-27.13			
-0.25	0.880	-1.11	15.00	0.013	-37.72	61.00	0.076	-22.38			
0.00	0.945	-0.49	16.00	0.029	-30.75	62.00	0.091	-20.82			
0.25	0.986	-0.13	17.00	0.003	-50.46	63.00	0.086	-21.31			
0.50	1.000	0.00	18.00	0.053	-25.51	64.00	0.070	-23.10			
0.75	0.986	-0.12	19.00	0.071	-22.97	65.00	0.066	-23.61			
1.00	0.946	-0.48	20.00	0.057	-24.88	66.00	0.095	-20.45			
1.25	0.881	-1.10	21.00	0.141	-17.02	67.00	0.140	-17.08			
1.50	0.796	-1.98	22.00	0.224	-13.00	68.00	0.183	-14.75			
1.75	0.693	-3.19	23.00	0.227	-12.88	69.00	0.216	-13.31			
2.00	0.579	-4.75	24.00	0.150	-16.48	70.00	0.236	-12.54			
2.25	0.462	-6.71	25.00	0.056	-25.04	71.00	0.241	-12.36			
2.50	0.350	-9.12	26.00	0.042	-27.54	72.00	0.234	-12.62			
2.75	0.258	-11.78	27.00	0.043	-27.33	73.00	0.217	-13.27			
3.00	0.203	-13.85	28.00	0.017	-35.39	74.00	0.193	-14.29			
3.25	0.204	-13.83	29.00	0.003	-50.46	75.00	0.166	-15.60			
3.50	0.236	-12.54	30.00	0.000	0.00	76.00	0.138	-17.20			
3.75	0.275	-11.21	31.00	0.012	-38.42	77.00	0.110	-19.17			
4.00	0.304	-10.34	32.00	0.017	-35.39	78.00	0.086	-21.31			
4.25	0.315	-10.05	33.00	0.055	-25.19	79.00	0.065	-23.74			
4.50	0.308	-10.23	34.00	0.115	-18.79	80.00	0.048	-26.38			
4.75	0.282	-10.98	35.00	0.156	-16.14	81.00	0.036	-28.87			
5.00	0.242	-12.32	36.00	0.149	-16.54	82.00	0.027	-31.37			
5.25	0.190	-14.45	37.00	0.098	-20.18	83.00	0.021	-33.56			
5.50	0.129	-17.79	38.00	0.043	-27.33	84.00	0.017	-35.39			
5.75	0.065	-23.74	39.00	0.058	-24.73	85.00	0.015	-36.48			
6.00	0.016	-35.92	40.00	0.068	-23.35	86.00	0.012	-38.42			
6.25	0.065	-23.74	41.00	0.042	-27.54	87.00	0.009	-40.92			



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Figure 3 - Sheet 4 of 4