TECHNICAL EXHIBIT
APPLICATION FOR MODIFICATION OF
LICENSED FACILTY
(FCC FILE NO. BLTTL-20030424ABQ)
LPTV STATION KSTV-LP
FACILITY ID 34570
SACRAMENTO, CALIFORNIA
CH 47 50 KW (MAX-DA)

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application for modification of the licensed facility for LPTV station KSTV-LP at Sacramento, California (Facility ID: 34570; File No. BLTTL-20030424ABQ). Station KSTVV-LP is currently licensed to operate on channel 60, which is located in that portion of the TV band (channels 52-69) which has been reallocated for other services. Pursuant to Section 73.3572(a)(4)(ii), KSTV-LP is considered to be displaced and permitted to file a displacement relief application at any time. Therefore, this application proposes to change to core-band channel 47, increase the maximum effective radiated power (ERP) from 43 kilowatts (kW) to 50 kW, and operate with an Andrew ALP12L2-HSER “off-the-shelf” directional antenna system oriented at 330 degrees true. No other changes are proposed including site, radiation center above mean sea level (RCAMSL), or community of license (Sacramento). As detailed below, this application is considered a "minor change" in facilities pursuant to Section 73.3572.

Minor Change Application

Figure 1 depicts the licensed and herein proposed 74 dBu contours for KSTV-LP. As indicated, the proposed 74 dBu contour encompasses essentially all of the licensed 74 dBu contour. Therefore, the proposed modification is also considered a "minor change” in facilities pursuant to Section 73.3572.

Response to Paragraph 13(a) - TV Broadcast Analog Protection

A study has been conducted using the provisions of Section 74.705 which indicate that the proposed KSTV-LP operation will not create prohibited interference to other

existing, authorized or proposed TV broadcast analog (NTSC) full-power stations.

Response to Paragraph 13(b) - DTV Station Protection

Calculations based on OET Bulletin No. 69 indicate that the proposed KSTV-LP operation on channel 47 complies with the FCC's 0.5% interference threshold criteria to all allotted, proposed or actual DTV operating facilities on channels 46, 47 & 48. The results are tabulated in Figure 2.

Response to Paragraph 13(c) – LPTV/TV Translator, Class A Station Protection

A study has been conducted which indicates that the KSTV-LP 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 operation of K47AL at Ukiah, CA (BLTTL-19830223IB).[1] However, based on the provisions of the OET-69 Bulletin as permitted by FCC rules [Section 74.707(e)] it is believed that KSTV-LP's proposed operation complies with the FCC's interference criteria towards K47AL. 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 KSTV-LP proposal is not predicted to cause any interference to K47AL.

Environmental Considerations

The proposed KSTV-LP 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 vertical pattern data for the proposed directional antenna. Using a worst-case vertical relative field value of 0.21, a maximum visual ERP of 50

[1] It is noted that KRJR-LP on channel 47 at Sacramento, CA has relocated to channel 36 (BLTTA-20010712AEQ) and has, therefore, not been considered for these studies.

kilowatts and 10 percent aural power, the calculated power density at 2 meters above ground level at the base of the tower is 0.0604 milliwatts per square centimeter (mW/cm^2), or 13.5% percent of the Commission's recommended limit of 0.45 mW/cm^2 for TV channel 47 applicable to general population/uncontrolled exposure areas and 2.7% of the 2.24 mW/cm^2 limit for a controlled environment. However, as this is a multi-user site, measurements will be made to substantiate compliance with RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, as this is a multi-user site, an agreement will be in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that 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.

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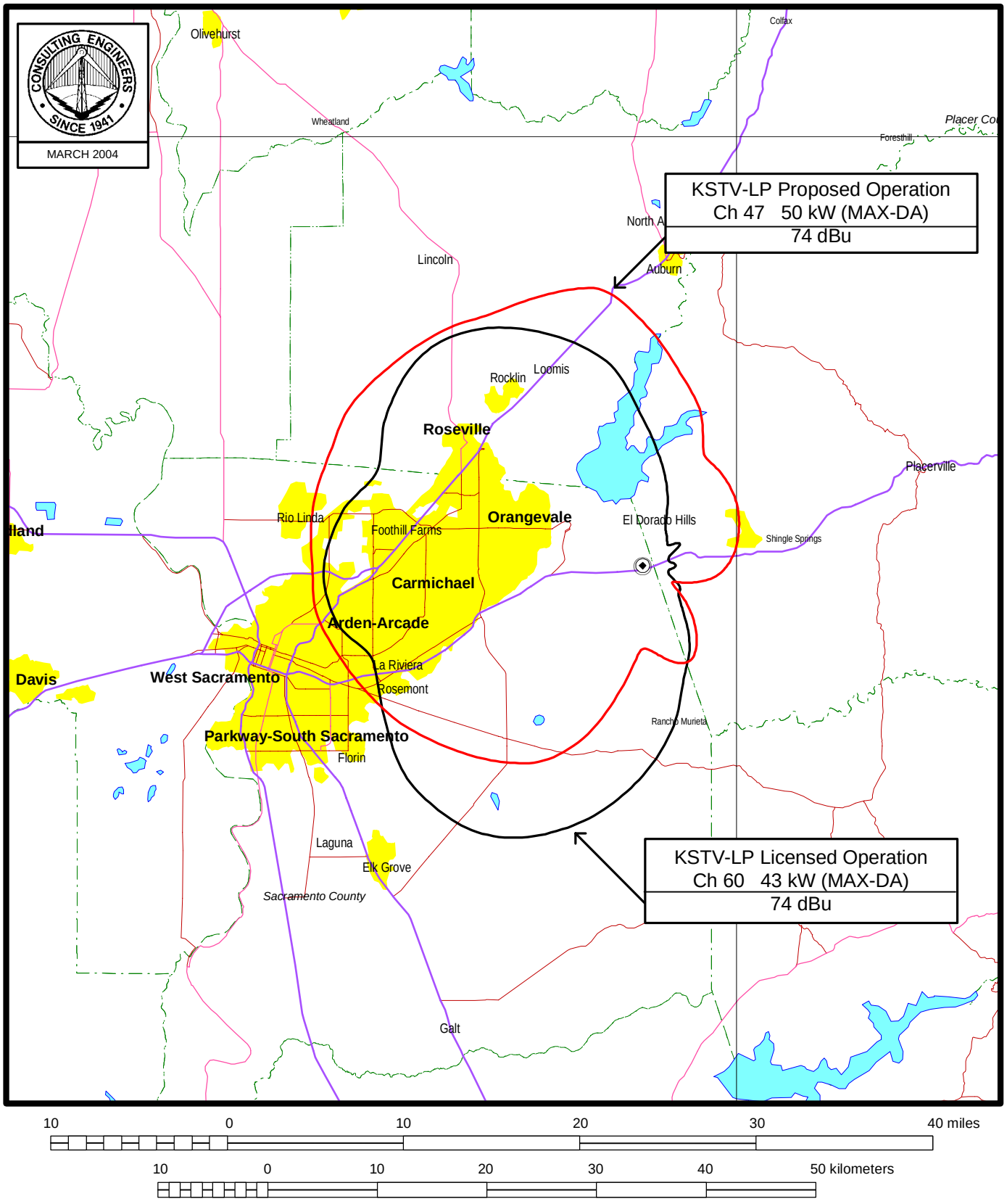
March 22, 2004

Figure 1



PREDICTED FCC COVERAGE CONTOURS

LPTV STATION KSTV-LP

SACRAMENTO, CALIFORNIA

CH 47 50 KW (MAX-DA)

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

OET-69 INTERFERENCE CAUSED SUMMARY

CELL SIZE : 2.00
Using offset in determining thresholds

****
DKQCA 38-14-24 121-30-03 46(0) 156.400 kw 561 m DA 90.0 % 41.7 dBu
STOCKTON CA 21148 3361 DTVSERVICE: 3361000 NTSCSERVICE: 3377000
DTVALT DTV ALLOTMENT
0.75 0.93 1.00 0.93 0.75 0.53 0.34 0.22 0.20 0.22 0.34 0.53
0.75 0.93 1.00 0.93 0.75 0.53 0.34 0.22 0.20 0.22 0.34 0.53
0.75 0.93 1.00 0.93 0.75 0.53 0.34 0.22 0.20 0.22 0.34 0.53
Ref Az: 0.0
Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	24910.76	4774443
not affected by terrain losses	22229.92	3559594

****
KSTV-LP 38-38-53 121-05-51 47(-) 50.000 kw 278.2 m DA 10.0 % 74.7
SACRAMENTO CA
PROPOSED
1.00 1.00 1.00 1.00 1.00 0.99 0.95 0.89 0.81 0.73 0.62 0.53
0.43 0.29 0.15 0.07 0.09 0.14 0.15 0.14 0.09 0.07 0.15 0.29
0.43 0.53 0.62 0.73 0.81 0.89 0.95 0.99 1.00 1.00 1.00 1.00
Ref Az: 330.0
Using DEFAULT vertical antenna pattern

D/U Baseline: -49.00

	Area	**Pop**
Interference	**0**	**0**

****
KQCA2 38-15-54 121-28-06 46(N) 1000.000 kw 533.4 m DA 90.0 % 41.7 dBu
STOCKTON CA 21148 3361 DTVSERVICE: 3361000 NTSCSERVICE: 3377000
CP BPCDT19991029AEZ
0.85 0.96 1.00 0.96 0.85 0.71 0.58 0.49 0.47 0.49 0.58 0.71
0.85 0.96 1.00 0.96 0.85 0.71 0.58 0.49 0.47 0.49 0.58 0.71
0.85 0.96 1.00 0.96 0.85 0.71 0.58 0.49 0.47 0.49 0.58 0.71
Ref Az: 0.0
Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	37059.61	6477775
not affected by terrain losses	32038.13	4215554

****
KSTV-LP 38-38-53 121-05-51 47(-) 50.000 kw 278.2 m DA 10.0 % 74.7
SACRAMENTO CA
PROPOSED
1.00 1.00 1.00 1.00 1.00 0.99 0.95 0.89 0.81 0.73 0.62 0.53
0.43 0.29 0.15 0.07 0.09 0.14 0.15 0.14 0.09 0.07 0.15 0.29
0.43 0.53 0.62 0.73 0.81 0.89 0.95 0.99 1.00 1.00 1.00 1.00
Ref Az: 330.0
Using DEFAULT vertical antenna pattern

D/U Baseline: -49.00

	Area	**Pop**
Interference	**0**	**0**

```
 ****************************
  KQCA     38-15-54 121-29-24  46(N)  600.000 kw 583     m 90.0 % 41.7 dBu
 STOCKTON        CA 21148    3361   DTVSERVICE: 3361000   NTSCSERVICE: 3377000
 APP     BMPCDT20020626AAA
 Using DEFAULT vertical antenna pattern
                                    Area              Pop
 within Noise Limited Contour     40407.86           7851549
 not affected by terrain losses   34144.98           4567155
 ************
  KSTV-LP    38-38-53   121-05-51  47(-)     50.000 kw 278.2   m DA   10.0 % 74.7
 SACRAMENTO          CA
 PROPOSED
 1.00  1.00  1.00  1.00  1.00  0.99  0.95  0.89  0.81  0.73  0.62  0.53
 0.43  0.29  0.15  0.07  0.09  0.14  0.15  0.14  0.09  0.07  0.15  0.29
 0.43  0.53  0.62  0.73  0.81  0.89  0.95  0.99  1.00  1.00  1.00  1.00
 Ref Az: 330.0
 Using DEFAULT vertical antenna pattern


D/U Baseline:  -49.00
                                   Area              Pop
 Interference                       0                 0


 ****************************
  KTLN-T   38-09-00 122-35-31  47(N) 1000.000 kw 503     m DA   90.0 % 41.7 dBu
 NOVATO          CA 20011    4106   DTVSERVICE: 4127520   NTSCSERVICE: 3674000
 CP      BPCDT19991026ABE
 0.10  0.10  0.10  0.10  0.10  0.11  0.18  0.33  0.50  0.67  0.82  0.93
 0.99  0.99  0.93  0.82  0.67  0.50  0.33  0.18  0.11  0.10  0.10  0.10
 0.10  0.10  0.10  0.11  0.10  0.10  0.10  0.10  0.10  0.10  0.11  0.10
 Ref Az:   0.0
 Using DEFAULT vertical antenna pattern
                                    Area              Pop
 within Noise Limited Contour     21565.12           5069311
 not affected by terrain losses   17444.90           4867292
 ************
  KSTV-LP    38-38-53   121-05-51  47(-)     50.000 kw 278.2   m DA   10.0 % 74.7
 SACRAMENTO          CA
 PROPOSED
 1.00  1.00  1.00  1.00  1.00  0.99  0.95  0.89  0.81  0.73  0.62  0.53
 0.43  0.29  0.15  0.07  0.09  0.14  0.15  0.14  0.09  0.07  0.15  0.29
 0.43  0.53  0.62  0.73  0.81  0.89  0.95  0.99  1.00  1.00  1.00  1.00
 Ref Az: 330.0
 Using DEFAULT vertical antenna pattern


D/U Baseline:    2.00
                                   Area              Pop
 Interference                      1016.05           8375
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****
DKWOK 38-08-53 122-35-33 47(0) 129.700 kw 533 m DA 90.0 % 41.7 dBu
NOVATO CA 20011 4106 DTVSERVICE: 4127520 NTSCSERVICE: 3674000
DTVALT DTV ALLOTMENT
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
1.00 1.00 1.00 1.00 0.99 0.96 0.94 0.94 0.94 0.94 0.94 0.94
0.94 0.94 0.94 0.94 0.94 0.94 0.95 0.97 0.99 0.99 1.00 1.00
Ref Az: 0.0
Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	25598.36	4696420
not affected by terrain losses	20793.43	4287854

****
KSTV-LP 38-38-53 121-05-51 47(-) 50.000 kw 278.2 m DA 10.0 % 74.7
SACRAMENTO CA
PROPOSED
1.00 1.00 1.00 1.00 1.00 0.99 0.95 0.89 0.81 0.73 0.62 0.53
0.43 0.29 0.15 0.07 0.09 0.14 0.15 0.14 0.09 0.07 0.15 0.29
0.43 0.53 0.62 0.73 0.81 0.89 0.95 0.99 1.00 1.00 1.00 1.00
Ref Az: 330.0
Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

	Area	**Pop**
Interference	**950.60**	**18318**

****
K47AL 39-07-03 123-05-35 47(N) 2.530 kw 1095 m DA 50.0 % 74.7 dBu
UKIAH CA
LIC BLTTL19830223IB
1.00 0.98 0.92 0.81 0.68 0.53 0.35 0.14 0.06 0.03 0.03 0.02
0.02 0.02 0.03 0.04 0.07 0.10 0.11 0.01 0.06 0.03 0.02 0.02
0.03 0.04 0.05 0.07 0.12 0.21 0.35 0.51 0.68 0.81 0.92 0.98
Ref Az: 290.0
Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	641.6942	31291
not affected by terrain losses	573.0854	31074

****
KSTV-LP 38-38-53 121-05-51 47(-) 50.000 kw 278.2 m DA 10.0 % 74.7
SACRAMENTO CA
PROPOSED
1.00 1.00 1.00 1.00 1.00 0.99 0.95 0.89 0.81 0.73 0.62 0.53
0.43 0.29 0.15 0.07 0.09 0.14 0.15 0.14 0.09 0.07 0.15 0.29
0.43 0.53 0.62 0.73 0.81 0.89 0.95 0.99 1.00 1.00 1.00 1.00
Ref Az: 330.0
Using DEFAULT vertical antenna pattern

D/U Baseline: 45.00

	Area	**Pop**
Interference	**4.04**	**0**

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****************************
 KSPX     38-15-54 121-29-24  48(N) 1000.000 kw 490.4   m DA   90.0 % 41.8 dBu
SACRAMENTO      CA 12538    1562   DTVSERVICE: 1562000   NTSCSERVICE: 1575000
CP      BPCDT19991101AKP
0.85  0.86  0.90  0.96  1.00  1.00  0.96  0.90  0.86  0.85  0.89  0.95
0.99  1.00  0.97  0.94  0.90  0.81  0.65  0.42  0.20  0.30  0.44  0.44
0.30  0.20  0.42  0.65  0.81  0.90  0.94  0.97  1.00  0.99  0.95  0.89
( 45.0 1.00)(225.0 0.47)
Ref Az:   0.0
Using DEFAULT vertical antenna pattern
                                  Area              Pop
within Noise Limited Contour     35387.06           5099460
not affected by terrain losses   31143.84           3620222
************
 KSTV-LP    38-38-53   121-05-51  47(-)     50.000 kw 278.2   m DA   10.0 % 74.7
SACRAMENTO          CA
PROPOSED
1.00  1.00  1.00  1.00  1.00  0.99  0.95  0.89  0.81  0.73  0.62  0.53
0.43  0.29  0.15  0.07  0.09  0.14  0.15  0.14  0.09  0.07  0.15  0.29
0.43  0.53  0.62  0.73  0.81  0.89  0.95  0.99  1.00  1.00  1.00  1.00
Ref Az: 330.0
Using DEFAULT vertical antenna pattern


D/U Baseline:  -48.00
                                  Area              Pop
 Interference                      0                 0




****************************
 DKCMY    38-37-49 120-51-20  48(0)  270.400 kw 713     m DA   90.0 % 41.8 dBu
SACRAMENTO      CA 12538    1562   DTVSERVICE: 1562000   NTSCSERVICE: 1575000
DTVALT  DTV ALLOTMENT
0.10  0.10  0.10  0.10  0.11  0.12  0.14  0.15  0.16  0.17  0.16  0.16
0.15  0.13  0.12  0.10  0.10  0.10  0.11  0.13  0.17  0.24  0.40  0.59
0.79  0.92  0.96  1.00  0.94  0.88  0.76  0.54  0.36  0.22  0.16  0.13
Ref Az:   0.0
Using DEFAULT vertical antenna pattern
                                  Area              Pop
within Noise Limited Contour     14029.19           1589304
not affected by terrain losses   13132.77           1572646
************
 KSTV-LP    38-38-53   121-05-51  47(-)     50.000 kw 278.2   m DA   10.0 % 74.7
SACRAMENTO          CA
PROPOSED
1.00  1.00  1.00  1.00  1.00  0.99  0.95  0.89  0.81  0.73  0.62  0.53
0.43  0.29  0.15  0.07  0.09  0.14  0.15  0.14  0.09  0.07  0.15  0.29
0.43  0.53  0.62  0.73  0.81  0.89  0.95  0.99  1.00  1.00  1.00  1.00
Ref Az: 330.0
Using DEFAULT vertical antenna pattern


D/U Baseline:  -48.00
                                  Area              Pop
 Interference                      0                 0
```
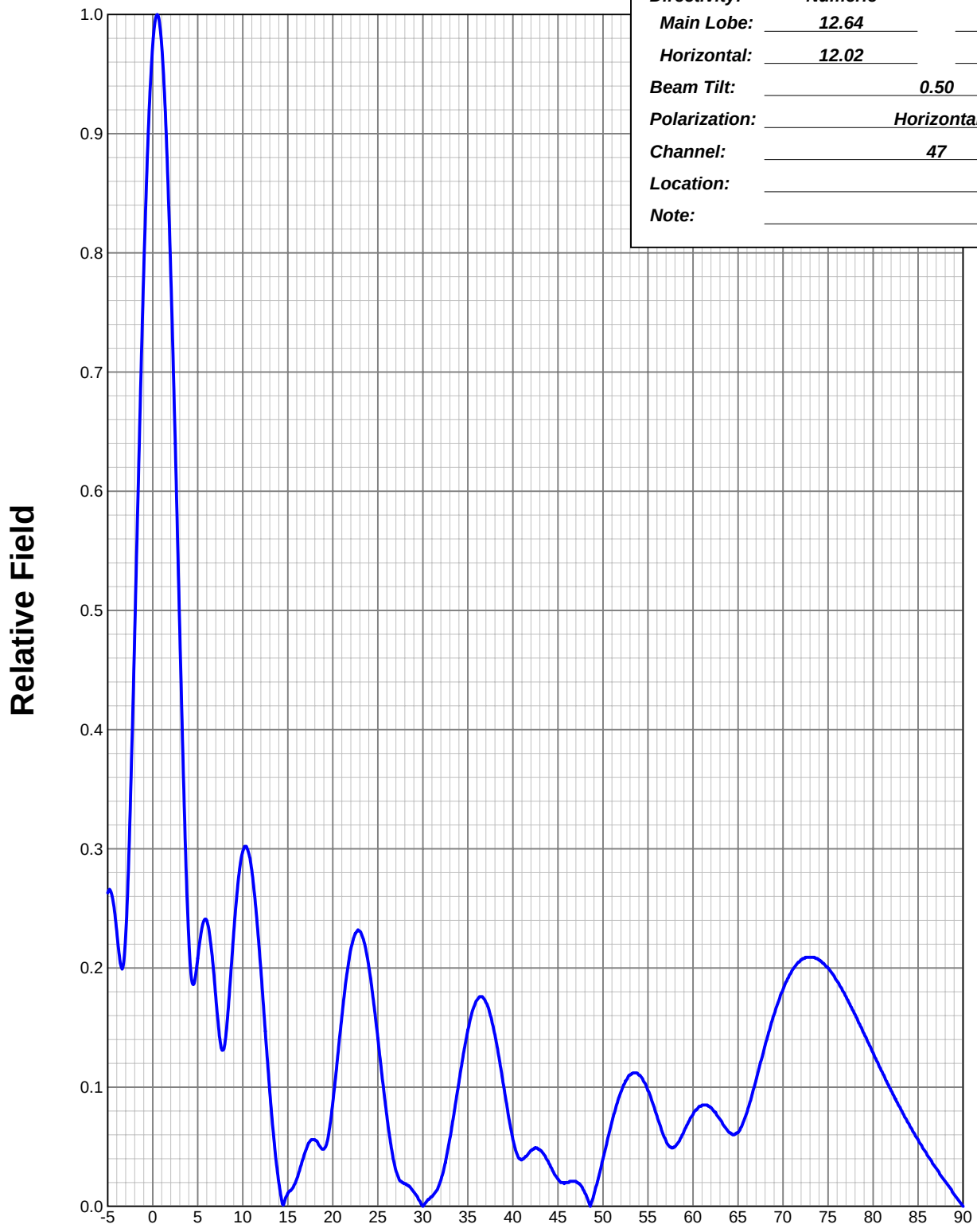

SUMMARY OF CALCULATIONS

Facility	Channel	Type	Baseline	Permissible	IX	%Base
DKQCA, STOCKTON, CA	46	DTV	4774254	0.5	0	0.00
KQCA2, STOCKTON, CA	46	DTV	4774254	0.5	0	0.00
KQCA, STOCKTON, CA	46	DTV	4774254	0.5	0	0.00
KTLN-T, NOVATO, CA	47	DTV	4127520	0.5	8375	0.20
DKWOK, NOVATO, CA	47	DTV	4127520	0.5	18318	0.44
K47AL, UKIAH, CA	47	TV	31291	0.5	0	0.00
KSPX, SACRAMENTO, CA	48	DTV	1575000	0.5	0	0.00
DKCMY, SACRAMENTO, CA	48	DTV	1575000	0.5	0	0.00

ELEVATION PATTERN

Type:	ALP12L2	
Directivity:	**Numeric**	**dBd**
Main Lobe:	12.64	11.02
Horizontal:	12.02	10.80
Beam Tilt:	0.50	
Polarization:	Horizontal	
Channel:	47	
Location:		
Note:		



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

Figure 3 - Sheet 1 of 2

3.22.04

ELEVATION TABULATED DATA

Type: ALP12L2

Polarization: Horizontal

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-5.00	0.263	-11.60	**6.50**	0.217	-13.27	**42.00**	0.047	-26.56	**88.00**	0.021	-33.56
-4.75	0.266	-11.52	**6.75**	0.198	-14.07	**43.00**	0.047	-26.56	**89.00**	0.010	-40.00
-4.50	0.260	-11.70	**7.00**	0.176	-15.09	**44.00**	0.036	-28.87	**90.00**	0.000	0.00
-4.25	0.248	-12.11	**7.25**	0.155	-16.19	**45.00**	0.023	-32.77			
-4.00	0.231	-12.73	**7.50**	0.138	-17.20	**46.00**	0.020	-33.98			
-3.75	0.213	-13.43	**7.75**	0.131	-17.65	**47.00**	0.021	-33.56			
-3.50	0.201	-13.94	**8.00**	0.136	-17.33	**48.00**	0.011	-39.17			
-3.25	0.204	-13.83	**8.25**	0.154	-16.28	**49.00**	0.010	-40.00			
-3.00	0.227	-12.88	**8.50**	0.177	-15.04	**50.00**	0.040	-27.96			
-2.75	0.272	-11.29	**8.75**	0.204	-13.81	**51.00**	0.071	-22.97			
-2.50	0.333	-9.55	**9.00**	0.230	-12.77	**52.00**	0.096	-20.35			
-2.25	0.405	-7.86	**9.25**	0.254	-11.92	**53.00**	0.110	-19.17			
-2.00	0.481	-6.36	**9.50**	0.274	-11.24	**54.00**	0.110	-19.17			
-1.75	0.561	-5.03	**9.75**	0.289	-10.80	**55.00**	0.097	-20.26			
-1.50	0.639	-3.89	**10.00**	0.298	-10.52	**56.00**	0.076	-22.38			
-1.25	0.714	-2.92	**11.00**	0.282	-11.00	**57.00**	0.055	-25.19			
-1.00	0.784	-2.11	**12.00**	0.199	-14.02	**58.00**	0.050	-26.02			
-0.75	0.847	-1.45	**13.00**	0.096	-20.35	**59.00**	0.063	-24.01			
-0.50	0.900	-0.92	**14.00**	0.020	-33.98	**60.00**	0.077	-22.27			
-0.25	0.943	-0.51	**15.00**	0.011	-39.17	**61.00**	0.085	-21.41			
0.00	0.975	-0.22	**16.00**	0.023	-32.77	**62.00**	0.083	-21.62			
0.25	0.994	-0.06	**17.00**	0.047	-26.56	**63.00**	0.073	-22.73			
0.50	1.000	0.00	**18.00**	0.056	-25.04	**64.00**	0.062	-24.15			
0.75	0.993	-0.06	**19.00**	0.048	-26.38	**65.00**	0.062	-24.15			
1.00	0.974	-0.23	**20.00**	0.087	-21.21	**66.00**	0.079	-22.05			
1.25	0.942	-0.52	**21.00**	0.159	-15.97	**67.00**	0.106	-19.49			
1.50	0.899	-0.92	**22.00**	0.216	-13.31	**68.00**	0.135	-17.39			
1.75	0.845	-1.46	**23.00**	0.231	-12.73	**69.00**	0.161	-15.86			
2.00	0.783	-2.12	**24.00**	0.201	-13.94	**70.00**	0.182	-14.80			
2.25	0.714	-2.92	**25.00**	0.141	-17.02	**71.00**	0.198	-14.07			
2.50	0.640	-3.88	**26.00**	0.076	-22.38	**72.00**	0.207	-13.68			
2.75	0.562	-5.01	**27.00**	0.030	-30.46	**73.00**	0.209	-13.60			
3.00	0.484	-6.30	**28.00**	0.019	-34.42	**74.00**	0.207	-13.68			
3.25	0.407	-7.81	**29.00**	0.012	-38.42	**75.00**	0.200	-13.98			
3.50	0.336	-9.47	**30.00**	0.000	0.00	**76.00**	0.189	-14.47			
3.75	0.273	-11.26	**31.00**	0.008	-41.94	**77.00**	0.176	-15.09			
4.00	0.225	-12.96	**32.00**	0.022	-33.15	**78.00**	0.161	-15.86			
4.25	0.195	-14.20	**33.00**	0.057	-24.88	**79.00**	0.145	-16.77			
4.50	0.186	-14.61	**34.00**	0.104	-19.66	**80.00**	0.129	-17.79			
4.75	0.194	-14.27	**35.00**	0.148	-16.59	**81.00**	0.113	-18.94			
5.00	0.208	-13.64	**36.00**	0.173	-15.24	**82.00**	0.097	-20.26			
5.25	0.224	-13.01	**37.00**	0.171	-15.34	**83.00**	0.083	-21.62			
5.50	0.235	-12.58	**38.00**	0.144	-16.83	**84.00**	0.069	-23.22			
5.75	0.241	-12.38	**39.00**	0.100	-20.00	**85.00**	0.056	-25.04			
6.00	0.240	-12.40	**40.00**	0.056	-25.04	**86.00**	0.043	-27.33			
6.25	0.232	-12.71	**41.00**	0.039	-28.18	**87.00**	0.032	-29.90			

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