

TECHNICAL EXHIBIT  
DISPLACEMENT APPLICATION  
FOR STATION KVER-CA (FACILITY ID 69753)  
INDIO, CALIFORNIA  
CH 40 15 KW

Technical Narrative

This Technical Exhibit supports a digital displacement application for digital Class A television station KVER-CA at Indio, California. Station KVER-CA is licensed to operate on analog channel 4 with a directional antenna maximum visual effective radiated power (ERP) of 0.349 kilowatt (kW). KVER-CA holds a construction permit for operation on channel 11.<sup>1</sup>

The current channel 11 authorization for KVER-CA is displaced by full service digital station KTTV (channel 11, Los Angeles, CA), located 156 kilometers to the west, as well as full service digital station KYMA (channel 11, Yuma, AZ), located 174 kilometers to the southeast. Thus, station KVER-CA wishes to displace to channel 40.

Proposed Facilities

This application proposes digital operation on channel 40, at the authorized transmitter site. This is an existing site shared with many other LPTV/Class A stations. The site coordinates are (NAD27): 33-51-56 N Latitude, 116-25-58 W Longitude. An AND/ERI, W-cardioid directional antenna (oriented at 205° True) will be installed with the radiation center at the 15 meter (50 foot) level on the existing tower. This “off-the-shelf” antenna is specifically described in the FCC’s antenna database with make: “AND”, model: “ALP12L3-HSW”. The proposed ERP is 15 kW and the antenna RCAMSL will be 484.4 meters. The existing structure does not require registration as it is less than 200 feet in height and passes the slope to any nearby airports, based on the FCC’s TOWAIR program (see Figure 1).

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<sup>1</sup> See BLTVL-19900820IO and BDISDVA-20090612AIJ

Figure 2 is a map showing the licensed 62 dBu (analog), authorized 48 dBu and proposed 51 dBu coverage contours. As can be seen on the map, there is common area where the proposal's contours overlap both other operations.

### Allocation Considerations

A study has been conducted to assure that the proposal will not create prohibited interference with other licensed, authorized or pending digital TV, analog or digital Class A/LPTV/translator stations. Using the procedures outlined in the FCC's OET-69 Bulletin, a standard 1 kilometer grid and 1 kilometer terrain distance increment, and 2000 U.S. Census, the proposal complies with the current FCC policy (i.e., less than 0.5% new interference caused to other pertinent assignments). Figure 3 is a summary of the OET-69 interference results. Only those stations that had scenarios generated are shown (only worst case scenario is included). Three pending applications were ignored as they do not require protection from the displacement proposal.<sup>2</sup>

### Mexican Coordination

The proposed site is 141 kilometers from the U.S./Mexican border. The proposal meets the FCC's full service minimum separations for a digital TV station on channel 40 in Zone 2. Therefore, it is believed that the proposal should not impact any Mexican assignment. If coordination is necessary, it is respectfully requested.

### Radiofrequency Electromagnetic Field Exposure

The proposed KVER digital facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the antenna is located 15 meters above ground level. The proposed maximum ERP is 15 kW. Based on a downward relative field of 0.3 (see Appendix), the calculated power density

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<sup>2</sup> See BNPDTL-20100614AGS, BNPDTL-20100519AEB & BDCCDTL-20070410AAT

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Consulting Engineers

Page 3

Indio, California

at a point 2 meters (6.6 feet) above ground level will not exceed 65% of the FCC's recommended limit of 0.42 mW/cm<sup>2</sup> for channel 40 for an "uncontrolled" environment. Due to the large number of other broadcast emitters in the area, RF measurements will be taken to ensure that the level is within the recommended limits.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas 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 station is at reduced power or shut down.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.



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September 21, 2010

## TOWAIR Determination Results

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

### \*\*\* NOTICE \*\*\*

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

### DETERMINATION Results

#### PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7670.90 MTRS (7.67089 KM) AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	33-50-7.00N	116-30-35.00W	PALM SPRINGS INTL	RIVERSIDE PALM SPRINGS, CA	121.4	3048.3000000000002

#### PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7875.72 MTRS (7.87570 KM) AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	33-50-26.00N	116-31-3.00W	PALM SPRINGS INTL	RIVERSIDE PALM SPRINGS, CA	121.4	3048.3000000000002

### Your Specifications

#### NAD83 Coordinates

Latitude	33-51-56.1 north
Longitude	116-26-01.0 west

#### Measurements (Meters)

Overall Structure Height (AGL)	33.2
Support Structure Height (AGL)	33.2
Site Elevation (AMSL)	469.4

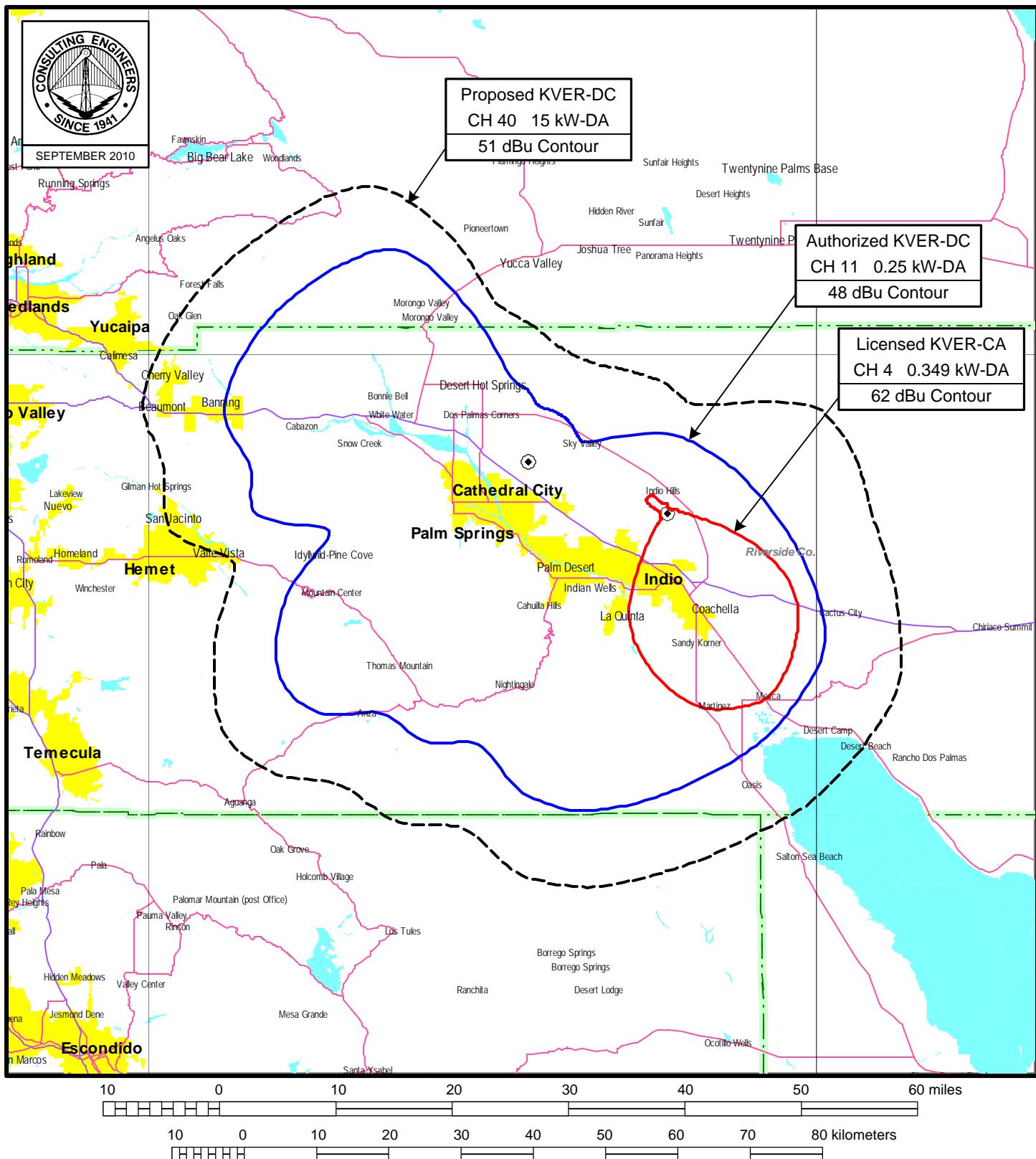
#### Structure Type

TOWER - Free standing or Guyed Structure used for Communications Purposes

#### Tower Construction Notifications

Notify Tribes and Historic Preservation Officers of your plans to build a tower.

Figure 2



## PREDICTED COVERAGE CONTOURS

STATION KVER-CA

INDIO, CALIFORNIA

CH 40 15 kW (MAX-DA)

du Treil, Lundin & Rackley, Inc Sarasota, Florida

OET-69 INTERFERENCE ANALYSIS SUMMARY

Percent allowed new interference: 0.500  
Percent allowed new interference to non Class A LPTV: 2.000  
TW Census data selected 2000  
Data Base Selected  
`/export/home/cdbs/pt_tvdb.sff`  
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 09-20-2010 Time: 13:49:37  
Record Selected for Analysis

KVER USERRECORD-01 INDIO XX US  
Channel 40 ERP 15. kW HAAT 219. m RCAMSL 00484 m STRINGENT MASK  
Latitude 033-51-56 Longitude 0116-25-58  
Status APP Zone 2 Border Site number: 01  
Dir Antenna Make CDB Model 00000000016408 Beam tilt N Ref Azimuth 205.  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 1.0 km/side  
Distance Increments for Longley-Rice Analysis 1.00 km

Facility (site # 01) meets maximum height/power limits

Site number	1		
Azimuth	ERP	HAAT	51.0 dBu F(50,90)
(Deg)	(kW)	(m)	(km)
0.0	1.832	33.0	20.2
45.0	1.368	33.0	18.8
90.0	7.754	178.2	45.2
135.0	14.910	416.0	61.2
180.0	13.198	342.6	57.0
225.0	13.566	333.1	56.7
270.0	14.806	215.3	50.6
315.0	8.618	202.1	47.1

Contour Overlap to Proposed Station

Station  
KPCD-LP 40 BIG BEAR LAKE CA BLTTL20070525AIV

Station inside contour of Digital LPTV station  
KVER 40 INDIO XX USERRECORD01

Station  
KPCD-LP 40 BIG BEAR LAKE CA BPTTL20080122AQF

Station inside contour of Digital LPTV station  
KVER 40 INDIO XX USERRECORD01

Station  
K40HX 40 MORONGO VALLEY CA BLTT20060119ACC

Station inside contour of Digital LPTV station  
KVER 40 INDIO XX USERRECORD01

Station  
KNSD 40 SAN DIEGO CA BLCDT20040805AAL causes

Contour overlap to Digital LPTV station  
KVER 40 INDIO XX USERRECORD01

Station  
KNSD 40 SAN DIEGO CA BMPCDT20041029AHV causes

Contour overlap to Digital LPTV station  
KVER 40 INDIO XX USERRECORD01

Contour Overlap Evaluation to Proposed Station Complete

Checks to Site Number 01

Proposed facility OK to FCC Monitoring Stations  
Proposed facility OK toward West Virginia quiet zone  
Proposed facility OK toward Table Mountain  
Proposed facility is beyond the Canadian coordination distance  
Proposed facility is within the Mexican coordination distance  
Distance to border = 141.1km  
Proposed station is 2.55km from AM station  
THOUSAND PALMS CA KNWZ Status: L Antenna: DA2

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Start of Interference Analysis

Proposed Station			ARN
Channel	Call	City/State	
40	KVER	INDIO XX	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
25	KPDC-LP	INDIO CA	0.0	LIC	BLTTL	-20030610ADC
Proposal causes no interference						
25	K25GK	JOSHUA TREE CA	49.8	LIC	BLTT	-20000605AOK
Proposal causes no interference						
25	KBLS-LP	RIVERSIDE AND PERRIS CA	78.9	LIC	BLTTL	-20081209APP
Proposed station is beyond the site to nearest cell evaluation distance						
25	K25AD	VICTORVILLE, ETC. CA	114.1	LIC	BLTT	-19820105IE
Proposed station is beyond the site to nearest cell evaluation distance						
26	K26FA	VISTA CA	107.2	LIC	BLTTL	-19990809JJ
Proposed station is beyond the site to nearest cell evaluation distance						
26	K26FA	VISTA CA	107.5	APP	BSTA	-20090304ABK
Proposed station is beyond the site to nearest cell evaluation distance						
32	K32EM	MORONGO VALLEY CA	24.5	LIC	BLTTL	-19970721JS
Proposal causes no interference						
33	KRVD-LP	BANNING CA	40.0	LIC	BLTTL	-20070103ACI
Proposal causes no interference						
33	KDFX-CA	INDIO/PALM SPRINGS CA	0.1	LIC	BLTTA	-20030313ALZ
Proposal causes no interference						
33	K33DK	LUCERNE VALLEY CA	78.1	LIC	BLTT	-19910927IB
Proposed station is beyond the site to nearest cell evaluation distance						
36	K36JH	BARSTOW CA	114.5	LIC	BLTTL	-20090401AXW
Proposed station is beyond the site to nearest cell evaluation distance						
36	K36JH	BARSTOW CA	114.5	APP	BSTA	-20070207ABY
Proposed station is beyond the site to nearest cell evaluation distance						
36	K36FO	CALEXICO CA	133.2	LIC	BLTTL	-20030611AAI
Proposed station is beyond the site to nearest cell evaluation distance						
36	K36GO	MORONGO VALLEY CA	24.5	LIC	BLTT	-20060331AEU
Proposal causes no interference						
38	KSCD-LP	BIG BEAR LAKE CA	67.7	LIC	BLTTL	-20080630ADI
Proposed station is beyond the site to nearest cell evaluation distance						
38	KPSP-LP	CATHEDRAL CITY, ETC. CA	0.0	LIC	BLTTA	-20020912ABB
Proposal causes no interference						
39	K39FV	LAKE HAVASU CITY AZ	206.4	CP	BDFCDTT	-20090824ADW
Proposed station is beyond the site to nearest cell evaluation distance						
39	K39FV	LAKE HAVASU CITY AZ	206.4	LIC	BLTT	-20040521AAK
Proposed station is beyond the site to nearest cell evaluation distance						
39	KVEA	CORONA CA	154.9	LIC	BLCDT	-20030507AAW
Proposal causes no interference						
39	KVEA	CORONA CA	154.9	CP	BPCDT	-20080620ANU
39	K39DW	DAGGETT, ETC. CA	121.0	LIC	BLTT	-19950929IK
Proposed station is beyond the site to nearest cell evaluation distance						

**Figure 3**  
**Sheet 3 of 14**

39	NEW	DESERT CENTER CA	70.0	APP	BNPDTL	-20100514ACP
Proposal causes no interference						
3	9NEW	HOLTVILLE CA	162.2	APP	BNPDTL	-20100510AAE
Proposed station is beyond the site to nearest cell evaluation distance						
39	NEW	PALM SPRINGS CA	0.1	APP	BNPDTL	-20100614AGS
Protection not afforded by proposed displacement application						
39	KZSD-LP	SAN DIEGO CA	138.1	CP	BDISDTL	-20080801BAR
Proposal causes no interference						
39	K39GY	VICTORVILLE CA	114.0	LIC	BLTT	-20030822AFM
Proposal causes no interference						
39	K39GY	VICTORVILLE CA	114.0	CP	BDFCDTT	-20060223AAM
Proposal causes no interference						
40	K40AD	COTTONWOOD, ETC. AZ	406.8	LIC	BLTT	-19890725IH
Proposed station is beyond the site to nearest cell evaluation distance						
40	K40AD	COTTONWOOD, ETC. AZ	406.8	CP	BDFCDTT	-20090501ABX
Proposed station is beyond the site to nearest cell evaluation distance						
40	NEW	GOLDEN VALLEY AZ	257.2	APP	BNPDTL	-20100510AEA
Proposal causes no interference						
40	NEW	WELLTON AZ	259.8	APP	BNPDTL	-20100510AAM
Proposal causes no interference						
40	NEW	YUMA AZ	221.0	APP	BMJADTL	-20100517ABA
Proposal causes no interference						
40	NEW	BARSTOW CA	126.4	APP	BDCCDTL	-20060922ACI
Proposal causes no interference						
40	NEW	BARSTOW CA	126.4	APP	BSFDTL	-20060630CDQ
Proposal causes no interference						
40	KPCD-LP	BIG BEAR LAKE CA	47.7	LIC	BLTTL	-20070525AIV
Proposal causes no interference						
40	KPCD-LP	BIG BEAR LAKE CA	47.7	CP	BPTTL	-20080122AQF
Proposal causes no interference						
40	NEW	EL CENTRO CA	144.4	APP	BNPDTL	-20090825ACA
Proposal causes no interference						
40	KVHD-LP	GLENDALE CA	155.7	APP	BDISDTL	-20081205AFB
Proposal causes no interference						
40	KRMV-LP	MORENO VALLEY CA	78.8	CP	BDISDTL	-20080310AEA
40	K40HX	MORONGO VALLEY CA	24.5	LIC	BLTT	-20060119ACC
40	NEW	PALM SPRINGS CA	0.1	APP	BNPDTL	-20100519AEB
Protection not afforded by proposed displacement application						
40	KNSD	SAN DIEGO CA	138.0	LIC	BLCDT	-20040805AAL
40	KNSD	SAN DIEGO CA	138.0	CP MOD	BMPCDT	-20041029AHV
Proposal causes no interference						
40	NEW	SANTA BARBARA CA	280.6	APP	BNPDTL	-20100429ADD
Proposal causes no interference						
40	KWSM-LP	SANTA MARIA CA	363.3	LIC	BLTTL	-20030414AAS
Proposed station is beyond the site to nearest cell evaluation distance						
40	KFRE-CA	TULARE CA	346.8	LIC	BLTTL	-19941108IA
Proposal causes no interference						
40	KBLR	PARADISE NV	271.5	CP	BPCDT	-20080703AAG
Proposal causes no interference						
40	KBLR	PARADISE NV	271.5	LIC	BLCDT	-20060705ABB
Proposal causes no interference						
41	NEW	LAKE HAVASU AZ	202.5	APP	BNPDTL	-20100510ADJ
Proposed station is beyond the site to nearest cell evaluation distance						
41	NEW	PARKER AZ	205.4	APP	BNPDTL	-20100514ADK
Proposed station is beyond the site to nearest cell evaluation distance						
41	K41CY	DAGGETT CA	121.0	LIC	BLTT	-19900817IE
Proposed station is beyond the site to nearest cell evaluation distance						
41	NEW	INDIO/PALM SPRINGS CA	0.1	APP	BDCCDTL	-20070410AAT
Protection not afforded by proposed displacement application						
41	KLCS	LOS ANGELES CA	155.3	CP MOD	BMPEDT	-20080620AIZ
41	KLCS	LOS ANGELES CA	155.3	LIC	BLEDT	-20030507AAS
41	K41CB	LUCERNE VALLEY CA	78.1	LIC	BLTT	-19880428IC
Proposal causes no interference						
41	NEW	NEEDLES CA	198.5	APP	BNPDTL	-20090825BQM
Proposed station is beyond the site to nearest cell evaluation distance						
41	KZSD-LP	SAN DIEGO CA	107.5	LIC	BLTTL	-20030507AAF
Proposal causes no interference						
43	K43EE	LUCERNE VALLEY CA	78.1	LIC	BLTT	-19960216JF

Proposed station is beyond the site to nearest cell evaluation distance  
 43 KDUO-LP PALM DESERT CA 0.1 LIC BLTTL -20071210ABX  
 Proposal causes no interference  
 43 KBOP-CA SAN DIEGO CA 138.1 LIC BLTTA -20080421ABQ  
 Proposed station is beyond the site to nearest cell evaluation distance  
 43 KSCT-CA SAN MARCOS CA 107.4 LIC BLTT -19941201JC  
 Proposed station is beyond the site to nearest cell evaluation distance  
 47 K47HZ BANNING CA 47.7 CP BNPTTL -20000831BVH  
 Proposed station is beyond the site to nearest cell evaluation distance  
 47 KIJR-LP LUCERNE VALLEY CA 0.1 LIC BLTTL -20050916ACW  
 Proposal causes no interference  
 47 K47IB TWENTYNINE PALMS, ETC CA 49.8 LIC BLTT -20050801BMB  
 Proposal causes no interference  
 48 K48IP DAGGETT CA 121.0 LIC BLTT -20041213ABH  
 Proposed station is beyond the site to nearest cell evaluation distance  
 48 K48AD LUCERNE VALLEY CA 78.1 LIC BLTT -2100  
 Proposed station is beyond the site to nearest cell evaluation distance  
 48 K48EM MORONGO VALLEY CA 24.5 LIC BLTT -19950310IE  
 Proposal causes no interference  
 48 KUAN-LP POWAY, ETC. CA 107.5 LIC BLTT -19810504IH  
 Proposed station is beyond the site to nearest cell evaluation distance

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#### Analysis of Interference to Affected Station 20

##### Analysis of current record

Channel	Call	City/State	Application Ref. No.
39	KVEA	CORONA CA	BPCDT -20080620ANU

##### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
38	KPXN-TV	SAN BERNARDINO CA	0.1	LIC	BLCDT -20050623AAG
40	KNSD	SAN DIEGO CA	198.3	LIC	BLCDT -20040805AAL
40	KNSD	SAN DIEGO CA	198.3	CP MOD	BMPCDT -20041029AHV
40	KVER	INDIO XX	154.9	APP	USERRECORD-01

Total scenarios = 2

Result key: 1

Scenario 1 Affected station 20

Before Analysis

Results for: 39A CA CORONA BPCDT 20080620ANU CP  
 HAAT 911.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	16438117	44144.7
not affected by terrain losses	15337029	33711.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	159112	338.5
lost to ATV IX only	159112	338.5
lost to all IX	159112	338.5

Potential Interfering Stations Included in above Scenario 1

40A CA SAN DIEGO BLCDT 20040805AAL LIC

After Analysis

Results for: 39A CA CORONA BPCDT 20080620ANU CP

	POPULATION	AREA (sq km)
within Noise Limited Contour	16438117	44144.7
not affected by terrain losses	15337029	33711.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	159691	355.3
lost to ATV IX only	159691	355.3

lost to all IX 159691 355.3

Potential Interfering Stations Included in above Scenario 1

40A CA SAN DIEGO	BLCDT	20040805AAL	LIC
40A XX INDIO	USERRECORD01		APP

Percent new IX = 0.0038%  
Worst case new IX 0.0038% Scenario 1

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Analysis of Interference to Affected Station 37

Analysis of current record

Channel	Call	City/State	Application Ref. No.
40	NEW	EL CENTRO CA	BNPDTL -20090825ACA

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
39	NEW	HOLTVILLE CA	25.7	APP	BNPDTL -20100510AAE
40	NEW	WELLTON AZ	144.4	APP	BNPDTL -20100510AAM
40	NEW	YUMA AZ	88.6	APP	BMJADTL -20100517ABA
40	KPCD-LP	BIG BEAR LAKE CA	187.9	CP	BPTTL -20080122AQF
40	KVHD-LP	GLENDALE CA	282.1	APP	BDISDTL -20081205AFB
40	K40HX	MORONGO VALLEY CA	168.6	LIC	BLTT -20060119ACC
40	NEW	PALM SPRINGS CA	144.5	APP	BNPDTL -20100519AEB
40	KNSD	SAN DIEGO CA	129.6	LIC	BLCDT -20040805AAL
40	KNSD	SAN DIEGO CA	129.6	CP MOD	BMPCDT -20041029AHV
40	KBLR	PARADISE NV	361.0	CP	BPCDT -20080703AAG
40	KBLR	PARADISE NV	360.9	LIC	BLCDT -20060705ABB
40	KVER	INDIO XX	144.4	APP	USERRECORD-01

Total scenarios = 2

Result key: 13

Scenario 1 Affected station 37

Before Analysis

Results for: 40A CA EL CENTRO BNPDTL 20090825ACA APP

HAAT	67.0 m, ATV ERP	15.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	127302	2707.6		
not affected by terrain losses	127302	2700.6		
lost to NTSC IX	0	0.0		
lost to additional IX by ATV	0	0.0		
lost to ATV IX only	0	0.0		
lost to all IX	0	0.0		

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 40A CA EL CENTRO BNPDTL 20090825ACA APP

HAAT	67.0 m, ATV ERP	15.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	127302	2707.6		
not affected by terrain losses	127302	2700.6		
lost to NTSC IX	0	0.0		
lost to additional IX by ATV	254	127.0		
lost to ATV IX only	254	127.0		
lost to all IX	254	127.0		

Potential Interfering Stations Included in above Scenario 1

40A XX INDIO	USERRECORD01	APP
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Percent new IX = 0.1995%  
Worst case new IX 0.1995% Scenario 1

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Analysis of Interference to Affected Station 40

Analysis of current record

Channel	Call	City/State	Application Ref. No.
40	K40HX	MORONGO VALLEY CA	BLTT -20060119ACC

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
32	KDOC-TV	ANAHEIM CA	141.1	CP MOD	BMPCDT -20040323ATA
32	KDOC-TV	ANAHEIM CA	141.1	LIC	BLCDT -20060626ACV
33	KTBN-TV	SANTA ANA CA	140.7	CP	BPCDT -20090323ABK
33	KTBN-DR	SANTA ANA CA	140.7	APP	BPRM -20081031ACN
36	KNBC	LOS ANGELES CA	140.9	LIC	BLCDT -19981123KG
36	KNBC	LOS ANGELES CA	108.8	APP	BMPCDT -20100811ABJ
36	KNBC	LOS ANGELES CA	140.9	APP	BMPCDT -20100811ABJ
36	KNBC	LOS ANGELES CA	140.9	CP	BPCDT -20050406ACJ
38	KPKN-TV	SAN BERNARDINO CA	140.5	LIC	BLCDT -20050623AAG
39	NEW	PALM SPRINGS CA	24.4	APP	BNPDTL -20100614AGS
40	NEW	BARSTOW CA	108.6	APP	BDCCDTL -20060922ACI
40	NEW	BARSTOW CA	108.6	APP	BSFDTL -20060630CDQ
40	KPCD-LP	BIG BEAR LAKE CA	32.0	CP	BPTTL -20080122AQF
40	KVPT	FRESNO CA	387.5	LIC	BLEDT -20040716ACA
40	KVHD-LP	GLENDALE CA	141.1	APP	BDISDTL -20081205AFB
40	KRMV-LP	MORENO VALLEY CA	68.7	CP	BDISDTL -20080310AEA
40	NEW	PALM SPRINGS CA	24.3	APP	BNPDTL -20100519AEB
40	KNSD	SAN DIEGO CA	156.3	LIC	BLCDT -20040805AAL
40	KNSD	SAN DIEGO CA	156.3	CP MOD	BMPCDT -20041029AHV
40	KBLR	PARADISE NV	257.6	CP	BPCDT -20080703AAG
40	KBLR	PARADISE NV	257.6	LIC	BLCDT -20060705ABB
41	NEW	INDIO/PALM SPRINGS CA	24.4	APP	BDCCDTL -20070410AAT
42	KWHY-TV	LOS ANGELES CA	140.5	LIC	BLCDT -20060629AFB
42	KESQ-TV	PALM SPRINGS CA	24.4	APP	BMPCDT -20091124ABY
42	KESQ-TV	PALM SPRINGS CA	41.6	APP	BMPCDT -20091124ABY
42	KESQ-TV	PALM SPRINGS CA	24.3	CP	BPCDT -20090506ACR
42	KESQ-TV	PALM SPRINGS CA	24.9	APP	BMPCDT -20091124ABY
43	KCBS-TV	LOS ANGELES CA	141.1	LIC	BLCDT -20090612AIQ
43	KCBS-TV	LOS ANGELES CA	141.1	CP MOD	BMPCDT -20080616ABQ
44	KHIZ	BARSTOW CA	140.5	APP	BMPCDT -20090601AAG
44	KHIZ	BARSTOW CA	24.9	APP	BMPCDT -20090601AAG
44	KHIZ	BARSTOW CA	91.1	LIC	BLCDT -20090126ADZ
44	KHIZ	BARSTOW CA	91.1	APP	BMPCDT -20090601AAG
47	KAZA-TV	AVALON CA	141.1	LIC	BLCDT -20051223AAZ
48	KOCE-TV	HUNTINGTON BEACH CA	141.0	LIC	BLEDT -20041117ADG
40	KVER	INDIO XX	24.5	APP	USERRECORD-01
36	KNBC	LOS ANGELES CA		APP	BMPCDT -20100811ABJ
36	KNBC	LOS ANGELES CA		APP	BMPCDT -20100811ABJ

Total scenarios = 2

Result key: 15  
Scenario 1 Affected station 40  
Before Analysis

Results for: 40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	18551	203.1	
not affected by terrain losses	18551	203.1	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	0	0.0	

Potential Interfering Stations Included in above Scenario 1

After Analysis

	BLTT	20060119ACC LIC
	POPULATION	AREA (sq km)
within Noise Limited Contour	18551	203.1
not affected by terrain losses	18551	203.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	188	9.9
lost to all IX	188	9.9

Potential Interfering Stations Included in above Scenario 1

40A XX INDIO USERRECORD01 APP

Percent new IX = 1.0134%  
Worst case new IX 1.0134% Scenario 1

#####

Analysis of Interference to Affected Station 42

Analysis of current record

Channel	Call	City/State	Application Ref. No.
40	KNSD	SAN DIEGO CA	BLCDT -20040805AAL

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
39	KVEA	CORONA CA	198.3	LIC	BLCDT -20030507AAW
39	KVEA	CORONA CA	198.3	CP	BPCDT -20080620ANU
40	KBLR	PARADISE NV	408.6	CP	BPCDT -20080703AAG
40	KBLR	PARADISE NV	408.6	LIC	BLCDT -20060705ABB
41	KLCS	LOS ANGELES CA	199.4	CP MOD	BMPEDT -20080620AIZ
41	KLCS	LOS ANGELES CA	199.4	LIC	BLEDT -20030507AAS
40	KVER	INDIO XX	138.0	APP	USERRECORD-01

Total scenarios = 4

Result key: 29  
Scenario 3 Affected station 42  
Before Analysis

Results for: 40A CA SAN DIEGO	BLCDT	20040805AAL LIC
HAAT 566.0 m, ATV ERP 370.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	3073717	31824.8
not affected by terrain losses	2969346	27064.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	9843	48.8
lost to ATV IX only	9843	48.8
lost to all IX	9843	48.8

Potential Interfering Stations Included in above Scenario 3

39A CA CORONA BPCDT 20080620ANU CP  
41A CA LOS ANGELES BMPEDT 20080620AIZ CP

After Analysis

Results for: 40A CA SAN DIEGO	BLCDT	20040805AAL LIC
HAAT 566.0 m, ATV ERP 370.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	3073717	31824.8
not affected by terrain losses	2969346	27064.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	9860	67.3

lost to ATV IX only	9860	67.3
lost to all IX	9860	67.3

Potential Interfering Stations Included in above Scenario 3

39A CA CORONA	BPCDT	20080620ANU	CP
41A CA LOS ANGELES	BMPEDT	20080620AIZ	CP
40A XX INDIO	USERRECORD01		APP

Percent new IX = 0.0006%  
Worst case new IX 0.0006% Scenario 3

#####

#### Analysis of Interference to Affected Station 53

##### Analysis of current record

Channel	Call	City/State	Application Ref. No.
41	KLCS	LOS ANGELES CA	BMPEDT -20080620AIZ

##### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	KNSD	SAN DIEGO CA	199.4	LIC	BLCDT -20040805AAL
40	KNSD	SAN DIEGO CA	199.4	CP MOD	BMPEDT -20041029AHV
42	KWHY-TV	LOS ANGELES CA	1.2	LIC	BLCDT -20060629AFB
42	KESQ-TV	PALM SPRINGS CA	155.2	APP	BMPEDT -20091124ABY
42	KESQ-TV	PALM SPRINGS CA	175.7	APP	BMPEDT -20091124ABY
42	KESQ-TV	PALM SPRINGS CA	155.0	CP	BPCDT -20090506ACR
42	KESQ-TV	PALM SPRINGS CA	116.8	APP	BMPEDT -20091124ABY
40	KVER	INDIO XX	155.3	APP	USERRECORD-01

Total scenarios = 2

Result key: 49  
Scenario 1 Affected station 53  
Before Analysis

Results for: 41A CA LOS ANGELES BMPEDT 20080620AIZ CP  
HAAT 902.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	16146857	41906.5
not affected by terrain losses	15060437	30593.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	161783	323.3
lost to ATV IX only	161783	323.3
lost to all IX	161783	323.3

Potential Interfering Stations Included in above Scenario 1

40A CA SAN DIEGO	BLCDT	20040805AAL	LIC
42A CA LOS ANGELES	BLCDT	20060629AFB	LIC

##### After Analysis

Results for: 41A CA LOS ANGELES BMPEDT 20080620AIZ CP  
HAAT 902.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	16146857	41906.5
not affected by terrain losses	15060437	30593.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	162293	331.2
lost to ATV IX only	162293	331.2
lost to all IX	162293	331.2

Potential Interfering Stations Included in above Scenario 1

40A CA SAN DIEGO	BLCDT	20040805AAL	LIC
------------------	-------	-------------	-----

42A CA LOS ANGELES	BLCDT	20060629AFB	LIC
40A XX INDIO		USERRECORD01	APP

Percent new IX = 0.0034%  
 Worst case new IX 0.0034% Scenario 1

#####

Analysis of Interference to Affected Station 54

Analysis of current record

Channel	Call	City/State	Application Ref. No.
41	KLCS	LOS ANGELES CA	BLEDT -20030507AAS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	KNSD	SAN DIEGO CA	199.4	LIC	BLCDT -20040805AAL
40	KNSD	SAN DIEGO CA	199.4	CP MOD	BMPCDT -20041029AHV
42	KWHY-TV	LOS ANGELES CA	1.2	LIC	BLCDT -20060629AFB
42	KESQ-TV	PALM SPRINGS CA	155.2	APP	BMPCDT -20091124ABY
42	KESQ-TV	PALM SPRINGS CA	175.7	APP	BMPCDT -20091124ABY
42	KESQ-TV	PALM SPRINGS CA	155.0	CP	BPCDT -20090506ACR
42	KESQ-TV	PALM SPRINGS CA	116.8	APP	BMPCDT -20091124ABY
40	KVER	INDIO XX	155.3	APP	USERRECORD-01

Total scenarios = 2

Result key: 51

Scenario 1 Affected station 54

Before Analysis

Results for: 41A CA LOS ANGELES	BLEDT	20030507AAS	LIC
HAAT 901.0 m, ATV ERP 162.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	15505941	31730.0	
not affected by terrain losses	14064152	22402.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	135681	240.4	
lost to ATV IX only	135681	240.4	
lost to all IX	135681	240.4	

Potential Interfering Stations Included in above Scenario 1

40A CA SAN DIEGO	BLCDT	20040805AAL	LIC
42A CA LOS ANGELES	BLCDT	20060629AFB	LIC

After Analysis

Results for: 41A CA LOS ANGELES	BLEDT	20030507AAS	LIC
HAAT 901.0 m, ATV ERP 162.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	15505941	31730.0	
not affected by terrain losses	14064152	22402.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	135965	242.4	
lost to ATV IX only	135965	242.4	
lost to all IX	135965	242.4	

Potential Interfering Stations Included in above Scenario 1

40A CA SAN DIEGO	BLCDT	20040805AAL	LIC
42A CA LOS ANGELES	BLCDT	20060629AFB	LIC
40A XX INDIO	USERRECORD01		APP

Percent new IX = 0.0020%  
 Worst case new IX 0.0020% Scenario 1

#####

Analysis of Interference to Affected Station 69

Analysis of current record

Channel	Call	City/State	Application Ref. No.
40	KVER	INDIO XX	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
39	NEW	DESERT CENTER CA	70.0	APP	BNPDTL -20100514ACP
39	NEW	PALM SPRINGS CA	0.1	APP	BNPDTL-20100614AGS (removed)
39	K39GY	VICTORVILLE CA	114.0	CP	BDFCDTT -20060223AAM
40	NEW	BARSTOW CA	126.4	APP	BDCCDTL -20060922ACI
40	NEW	BARSTOW CA	126.4	APP	BSFDTL -20060630CDQ
40	KPCD-LP	BIG BEAR LAKE CA	47.7	CP	BPTTL -20080122AQF
40	NEW	EL CENTRO CA	144.4	APP	BNPDTL -20090825ACA
40	KVHD-LP	GLENDALE CA	155.7	APP	BDISDTL -20081205AFB
40	KRMV-LP	MORENO VALLEY CA	78.8	CP	BDISDTL -20080310AEA
40	K40HX	MORONGO VALLEY CA	24.5	LIC	BLTT -20060119ACC
40	NEW	PALM SPRINGS CA	0.1	APP	BNPDTL-0100519AEB (removed)
40	KNSD	SAN DIEGO CA	138.0	LIC	BLCDT -20040805AAL
40	KNSD	SAN DIEGO CA	138.0	CP MOD	BMPCDT -20041029AHV
40	KBLR	PARADISE NV	271.5	CP	BPCDT -20080703AAG
40	KBLR	PARADISE NV	271.5	LIC	BLCDT -20060705ABB
41	NEW	INDIO/PALM SPRINGS CA	0.1	APP	BDCCDTL-20070410AAT (removed)

Total scenarios = 50

Result key: 53

Scenario 1 Affected station 69

Before Analysis

Results for: 40A XX INDIO	USERRECORD01	APP
HAAT 219.0 m, ATV ERP 15.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	448035	7003.5
not affected by terrain losses	343408	5277.9
lost to NTSC IX	106	51.4
lost to additional IX by ATV	17	22.7
lost to ATV IX only	19	30.7
lost to all IX	123	74.2

Potential Interfering Stations Included in above Scenario 1

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
40A CA SAN DIEGO	BLCDT	20040805AAL	LIC

Result key: 54

Scenario 2 Affected station 69

Before Analysis

Results for: 40A XX INDIO	USERRECORD01	APP
HAAT 219.0 m, ATV ERP 15.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	448035	7003.5
not affected by terrain losses	343408	5277.9
lost to NTSC IX	106	51.4
lost to additional IX by ATV	17	23.7
lost to ATV IX only	19	31.6
lost to all IX	123	75.2

Potential Interfering Stations Included in above Scenario 2

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC

40A CA SAN DIEGO                    BMPCDT                    20041029AHV CP

Result key:                    60  
 Scenario                    8      Affected station                    69  
 Before Analysis

Results for: 40A XX INDIO                    USERRECORD01                    APP  
 HAAT 219.0 m, ATV ERP 15.0 kW                    POPULATION                    AREA (sq km)  
 within Noise Limited Contour                    448035                    7003.5  
 not affected by terrain losses                    343408                    5277.9  
 lost to NTSC IX                                    106                            51.4  
 lost to additional IX by ATV                            26                            112.7  
 lost to ATV IX only                                    96                            133.5  
 lost to all IX    132                            164.2

Potential Interfering Stations Included in above Scenario                    8

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
40A CA BARSTOW	BDCCDTL	20060922ACI	APP
40A CA EL CENTRO	BNPDTL	20090825ACA	APP
40A CA SAN DIEGO	BLCDT	20040805AAL	LIC

Result key:                    62  
 Scenario                    10      Affected station                    69  
 Before Analysis

Results for: 40A XX INDIO                    USERRECORD01                    APP  
 HAAT 219.0 m, ATV ERP 15.0 kW                    POPULATION                    AREA (sq km)  
 within Noise Limited Contour                    448035                    7003.5  
 not affected by terrain losses                    343408                    5277.9  
 lost to NTSC IX                                    106                            51.4  
 lost to additional IX by ATV                            26                            113.7  
 lost to ATV IX only                                    96                            134.5  
 lost to all IX    132                            165.2

Potential Interfering Stations Included in above Scenario                    10

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
40A CA BARSTOW	BDCCDTL	20060922ACI	APP
40A CA EL CENTRO	BNPDTL	20090825ACA	APP
40A CA SAN DIEGO	BMPCDT	20041029AHV	CP

Result key:                    68  
 Scenario                    16      Affected station                    69  
 Before Analysis

Results for: 40A XX INDIO                    USERRECORD01                    APP  
 HAAT 219.0 m, ATV ERP 15.0 kW                    POPULATION                    AREA (sq km)  
 within Noise Limited Contour                    448035                    7003.5  
 not affected by terrain losses                    343408                    5277.9  
 lost to NTSC IX                                    106                            51.4  
 lost to additional IX by ATV                            17                            22.7  
 lost to ATV IX only                                    19                            30.7  
 lost to all IX    123                            74.2

Potential Interfering Stations Included in above Scenario                    16

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
40A CA BARSTOW	BDCCDTL	20060922ACI	APP
40A CA SAN DIEGO	BLCDT	20040805AAL	LIC

Result key:                    70

Scenario 18 Affected station 69  
Before Analysis

Results for: 40A XX INDIO  
HAAT 219.0 m, ATV ERP 15.0 kW  
USERRECORD01 APP

	POPULATION	AREA (sq km)
within Noise Limited Contour	448035	7003.5
not affected by terrain losses	343408	5277.9
lost to NTSC IX	106	51.4
lost to additional IX by ATV	17	23.7
lost to ATV IX only	19	31.6
lost to all IX	123	75.2

Potential Interfering Stations Included in above Scenario 18

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
40A CA BARSTOW	BDCCDTL	20060922ACI	APP
40A CA SAN DIEGO	BMPCTD	20041029AHV	CP

Result key: 76  
Scenario 24 Affected station 69  
Before Analysis

Results for: 40A XX INDIO  
HAAT 219.0 m, ATV ERP 15.0 kW  
USERRECORD01 APP

	POPULATION	AREA (sq km)
within Noise Limited Contour	448035	7003.5
not affected by terrain losses	343408	5277.9
lost to NTSC IX	106	51.4
lost to additional IX by ATV	26	112.7
lost to ATV IX only	96	133.5
lost to all IX	132	164.2

Potential Interfering Stations Included in above Scenario 24

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
40A CA BARSTOW	BSFDTL	20060630CDQ	APP
40A CA EL CENTRO	BNPDTL	20090825ACA	APP
40A CA SAN DIEGO	BLCDT	20040805AAL	LIC

Result key: 78  
Scenario 26 Affected station 69  
Before Analysis

Results for: 40A XX INDIO  
HAAT 219.0 m, ATV ERP 15.0 kW  
USERRECORD01 APP

	POPULATION	AREA (sq km)
within Noise Limited Contour	448035	7003.5
not affected by terrain losses	343408	5277.9
lost to NTSC IX	106	51.4
lost to additional IX by ATV	26	113.7
lost to ATV IX only	96	134.5
lost to all IX	132	165.2

Potential Interfering Stations Included in above Scenario 26

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
40A CA BARSTOW	BSFDTL	20060630CDQ	APP
40A CA EL CENTRO	BNPDTL	20090825ACA	APP
40A CA SAN DIEGO	BMPCTD	20041029AHV	CP

Result key: 84  
Scenario 32 Affected station 69  
Before Analysis

**Figure 3**  
**Sheet 13 of 14**

Potential Interfering Stations Included in above Scenario 32

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTTT	20060119ACC	LIC
40A CA BARSTOW	BSFDTL	20060630CDQ	APP
40A CA SAN DIEGO	BLCDT	20040805AAL	LIC

Result key: 86  
Scenario 34 Affected station 69  
Before Analysis

Potential Interfering Stations Included in above Scenario 34

40N	CA	BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N	CA	MORONGO VALLEY	BLTTT	20060119ACC	LIC
40A	CA	BARSTOW	BSFDTL	20060630CDQ	APP
40A	CA	SAN DIEGO	BMPCDT	20041029AHV	CP

Result key: 92  
Scenario 40 Affected station 69  
Before Analysis

Results for: 40A XX INDIO		USERRECORD01	APP
HAAT	219.0 m, ATV ERP	15.0 kW	
		POPULATION	AREA (sq km)
within Noise Limited Contour		448035	7003.5
not affected by terrain losses		343408	5277.9
lost to NTSC IX		106	51.4
lost to additional IX by ATV		26	112.7
lost to ATV IX only		96	133.5
lost to all IX		132	164.2

Potential Interfering Stations Included in above Scenario 40

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTTT	20060119ACC	LIC
40A CA EL CENTRO	BNPDTL	20090825ACA	APP
40A CA SAN DIEGO	BLCDT	20040805AAL	LIC

Result key: 94  
Scenario 42 Affected station 69  
Before Analysis

lost to NTSC IX	106	51.4
lost to additional IX by ATV	26	113.7
lost to ATV IX only	96	134.5
lost to all IX	132	165.2

Potential Interfering Stations Included in above Scenario 42

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
40A CA EL CENTRO	BNPDTL	20090825ACA	APP
40A CA SAN DIEGO	BMPCDT	20041029AHV	CP

Result key: 100

Scenario 48 Affected station 69

Before Analysis

Results for: 40A XX INDIO		USERRECORD01	APP
HAAT	219.0 m, ATV ERP	15.0 kW	
		POPULATION	AREA (sq km)
within Noise Limited Contour		448035	7003.5
not affected by terrain losses		343408	5277.9
lost to NTSC IX		106	51.4
lost to additional IX by ATV		17	22.7
lost to ATV IX only		19	30.7
lost to all IX		123	74.2

Potential Interfering Stations Included in above Scenario 48

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
40A CA SAN DIEGO	BLCDT	20040805AAL	LIC

Result key: 102

Scenario 50 Affected station 69

Before Analysis

Results for: 40A XX INDIO		USERRECORD01	APP
HAAT	219.0 m, ATV ERP	15.0 kW	
		POPULATION	AREA (sq km)
within Noise Limited Contour		448035	7003.5
not affected by terrain losses		343408	5277.9
lost to NTSC IX		106	51.4
lost to additional IX by ATV		17	23.7
lost to ATV IX only		19	31.6
lost to all IX		123	75.2

Potential Interfering Stations Included in above Scenario 50

40N CA BIG BEAR LAKE	BPTTL	20080122AQF	CP
40N CA MORONGO VALLEY	BLTT	20060119ACC	LIC
40A CA SAN DIEGO	BMPCDT	20041029AHV	CP

#####

FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

## **APPENDIX**

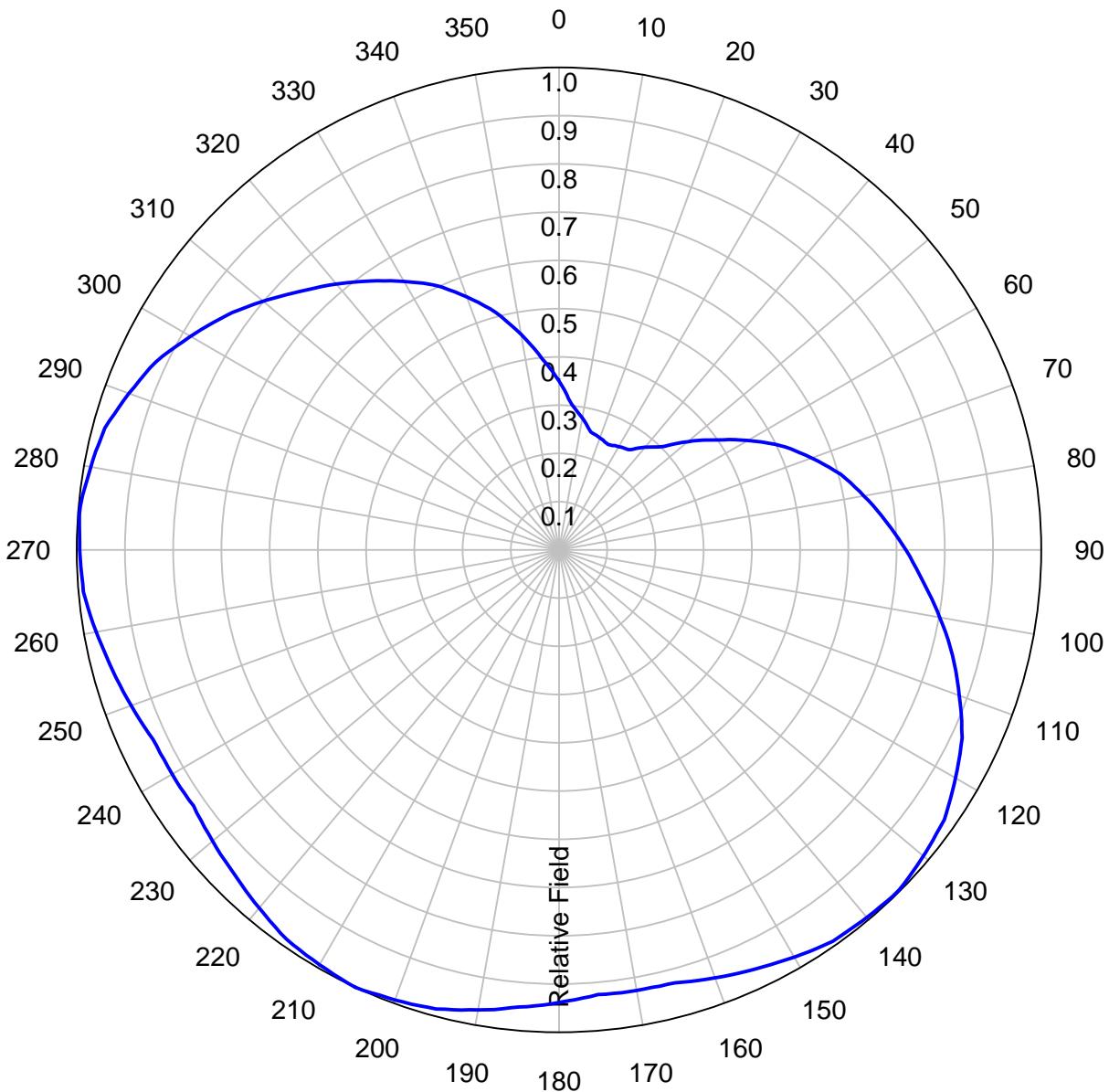
(Antenna Manufacturer's Pattern Data)

**AZIMUTH PATTERN****Type:****ALP-W****Directivity:  
Peak(s) at:**

<b>Numeric</b>	<b>dBd</b>
<b>1.56</b>	<b>1.93</b>

**Channel:** 40**Location:****Polarization:** Horizontal

Note: Pattern shape and directivity may vary with channel and mounting configuration.



*Preliminary, subject to final design and review.*

## **TABULATED DATA FOR AZIMUTH PATTERN**

**Type: ALP-W**  
**PolarizationHorizontal**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.350	-9.12	92	0.734	-2.69	184	0.949	-0.45	276	0.995	-0.04
2	0.331	-9.60	94	0.750	-2.50	186	0.954	-0.41	278	0.991	-0.08
4	0.311	-10.14	96	0.766	-2.32	188	0.962	-0.34	280	0.986	-0.12
6	0.297	-10.54	98	0.784	-2.11	190	0.968	-0.28	282	0.982	-0.16
8	0.287	-10.84	100	0.801	-1.93	192	0.975	-0.22	284	0.977	-0.20
10	0.278	-11.12	102	0.819	-1.73	194	0.981	-0.17	286	0.970	-0.26
12	0.268	-11.44	104	0.836	-1.56	196	0.986	-0.12	288	0.959	-0.36
14	0.258	-11.77	106	0.852	-1.39	198	0.990	-0.09	290	0.949	-0.45
16	0.252	-11.97	108	0.868	-1.23	200	0.993	-0.06	292	0.938	-0.56
18	0.250	-12.04	110	0.883	-1.08	202	0.995	-0.04	294	0.928	-0.65
20	0.247	-12.15	112	0.899	-0.92	204	0.999	-0.01	296	0.915	-0.77
22	0.245	-12.22	114	0.914	-0.78	206	0.999	-0.01	298	0.899	-0.92
24	0.242	-12.32	116	0.927	-0.66	208	0.996	-0.03	300	0.884	-1.07
26	0.242	-12.32	118	0.938	-0.56	210	0.993	-0.06	302	0.868	-1.23
28	0.245	-12.22	120	0.949	-0.45	212	0.990	-0.09	304	0.853	-1.38
30	0.247	-12.15	122	0.959	-0.36	214	0.987	-0.11	306	0.837	-1.55
32	0.250	-12.04	124	0.970	-0.26	216	0.982	-0.16	308	0.819	-1.73
34	0.252	-11.97	126	0.977	-0.20	218	0.975	-0.22	310	0.802	-1.92
36	0.258	-11.77	128	0.982	-0.16	220	0.968	-0.28	312	0.784	-2.11
38	0.268	-11.44	130	0.986	-0.12	222	0.962	-0.34	314	0.766	-2.32
40	0.278	-11.12	132	0.991	-0.08	224	0.955	-0.40	316	0.750	-2.50
42	0.287	-10.84	134	0.995	-0.04	226	0.949	-0.45	318	0.735	-2.67
44	0.297	-10.54	136	0.997	-0.03	228	0.944	-0.50	320	0.719	-2.87
46	0.311	-10.14	138	0.995	-0.04	230	0.938	-0.56	322	0.704	-3.05
48	0.330	-9.63	140	0.994	-0.05	232	0.933	-0.60	324	0.688	-3.25
50	0.349	-9.14	142	0.992	-0.07	234	0.928	-0.65	326	0.673	-3.44
52	0.369	-8.66	144	0.990	-0.09	236	0.926	-0.67	328	0.658	-3.64
54	0.388	-8.22	146	0.987	-0.11	238	0.927	-0.66	330	0.642	-3.85
56	0.408	-7.79	148	0.981	-0.17	240	0.927	-0.66	332	0.628	-4.04
58	0.431	-7.31	150	0.975	-0.22	242	0.927	-0.66	334	0.613	-4.25
60	0.454	-6.86	152	0.968	-0.28	244	0.928	-0.65	336	0.596	-4.50
62	0.476	-6.45	154	0.962	-0.34	246	0.932	-0.61	338	0.577	-4.78
64	0.499	-6.04	156	0.956	-0.39	248	0.938	-0.56	340	0.558	-5.07
66	0.520	-5.68	158	0.950	-0.45	250	0.944	-0.50	342	0.539	-5.37
68	0.538	-5.38	160	0.944	-0.50	252	0.950	-0.45	344	0.520	-5.68
70	0.557	-5.08	162	0.938	-0.56	254	0.956	-0.39	346	0.499	-6.04
72	0.576	-4.79	164	0.932	-0.61	256	0.962	-0.34	348	0.476	-6.45
74	0.595	-4.51	166	0.928	-0.65	258	0.968	-0.28	350	0.454	-6.86
76	0.612	-4.26	168	0.927	-0.66	260	0.975	-0.22	352	0.431	-7.31
78	0.627	-4.05	170	0.927	-0.66	262	0.981	-0.17	354	0.409	-7.77
80	0.642	-3.85	172	0.927	-0.66	264	0.987	-0.11	356	0.388	-8.22
82	0.658	-3.64	174	0.926	-0.67	266	0.990	-0.09	358	0.369	-8.66
84	0.673	-3.44	176	0.928	-0.65	268	0.992	-0.07	360	0.350	-9.12
86	0.688	-3.25	178	0.933	-0.60	270	0.994	-0.05			
88	0.703	-3.06	180	0.938	-0.56	272	0.995	-0.04			
90	0.719	-2.87	182	0.944	-0.50	274	0.997	-0.03			

*Preliminary, subject to final design and review.*

**TABULATED DATA FOR AZIMUTH PATTERN  
FCC FILING FORMAT**

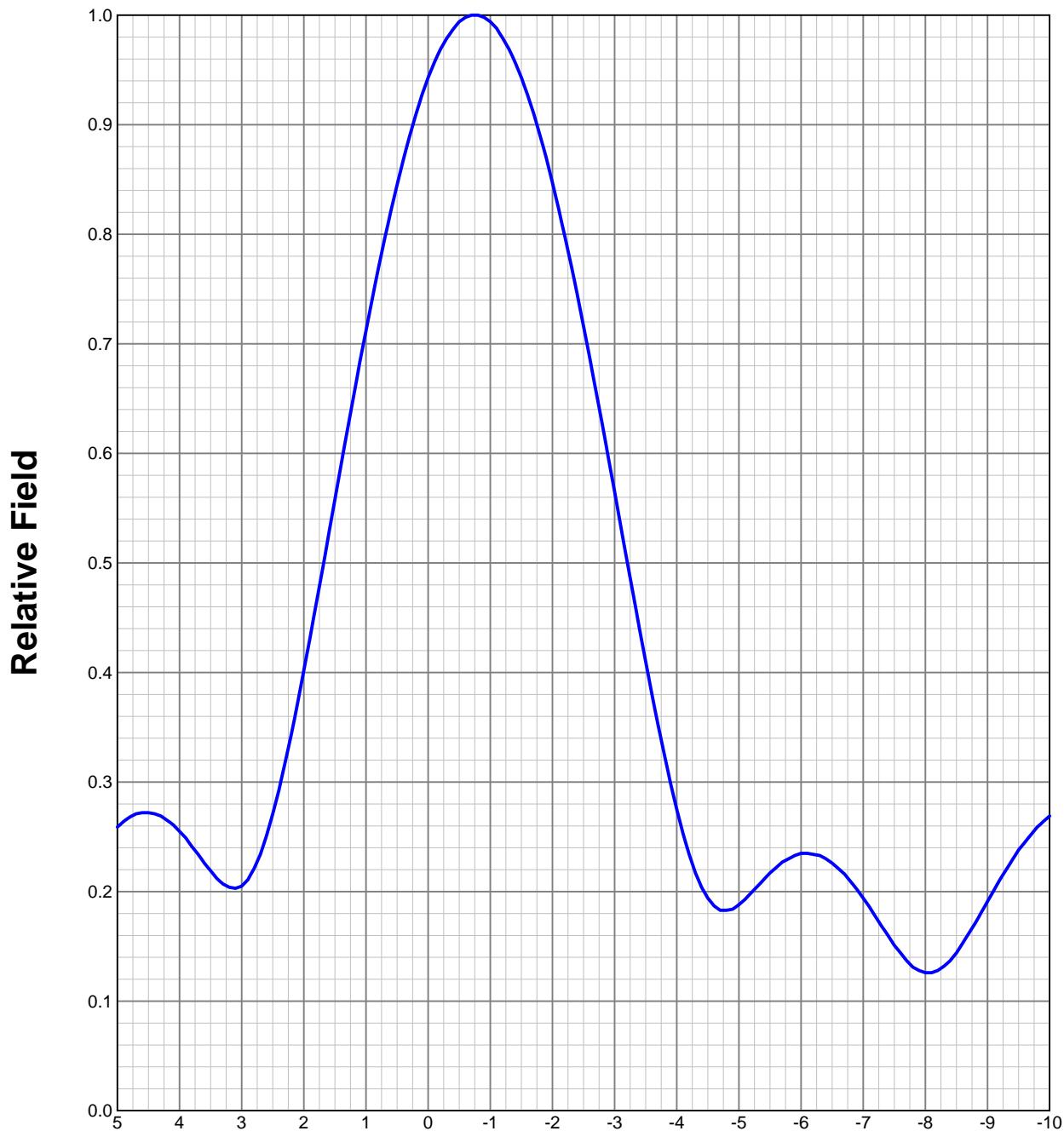
Type: ALP-W  
*PolarizationHorizontal*

ANGLE	FIELD	ERP (kW)	ERP (dBk)
0	0.350	1.837	2.642
10	0.278	1.159	0.642
20	0.247	0.915	-0.385
30	0.247	0.915	-0.385
40	0.278	1.159	0.642
50	0.349	1.827	2.617
60	0.454	3.092	4.902
70	0.557	4.654	6.678
80	0.642	6.182	7.912
90	0.719	7.754	8.895
100	0.801	9.624	9.834
110	0.883	11.695	10.680
120	0.949	13.509	11.306
130	0.986	14.583	11.638
140	0.994	14.821	11.709
150	0.975	14.259	11.541
160	0.944	13.367	11.260
170	0.927	12.890	11.103
180	0.938	13.198	11.205
190	0.968	14.055	11.478
200	0.993	14.791	11.700
210	0.993	14.791	11.700
220	0.968	14.055	11.478
230	0.938	13.198	11.205
240	0.927	12.890	11.103
250	0.944	13.367	11.260
260	0.975	14.259	11.541
270	0.994	14.821	11.709
280	0.986	14.583	11.638
290	0.949	13.509	11.306
300	0.884	11.722	10.690
310	0.802	9.648	9.844
320	0.719	7.754	8.895
330	0.642	6.182	7.912
340	0.558	4.670	6.694
350	0.454	3.092	4.902

*Preliminary, subject to final design and review.*

**ELEVATION PATTERN**

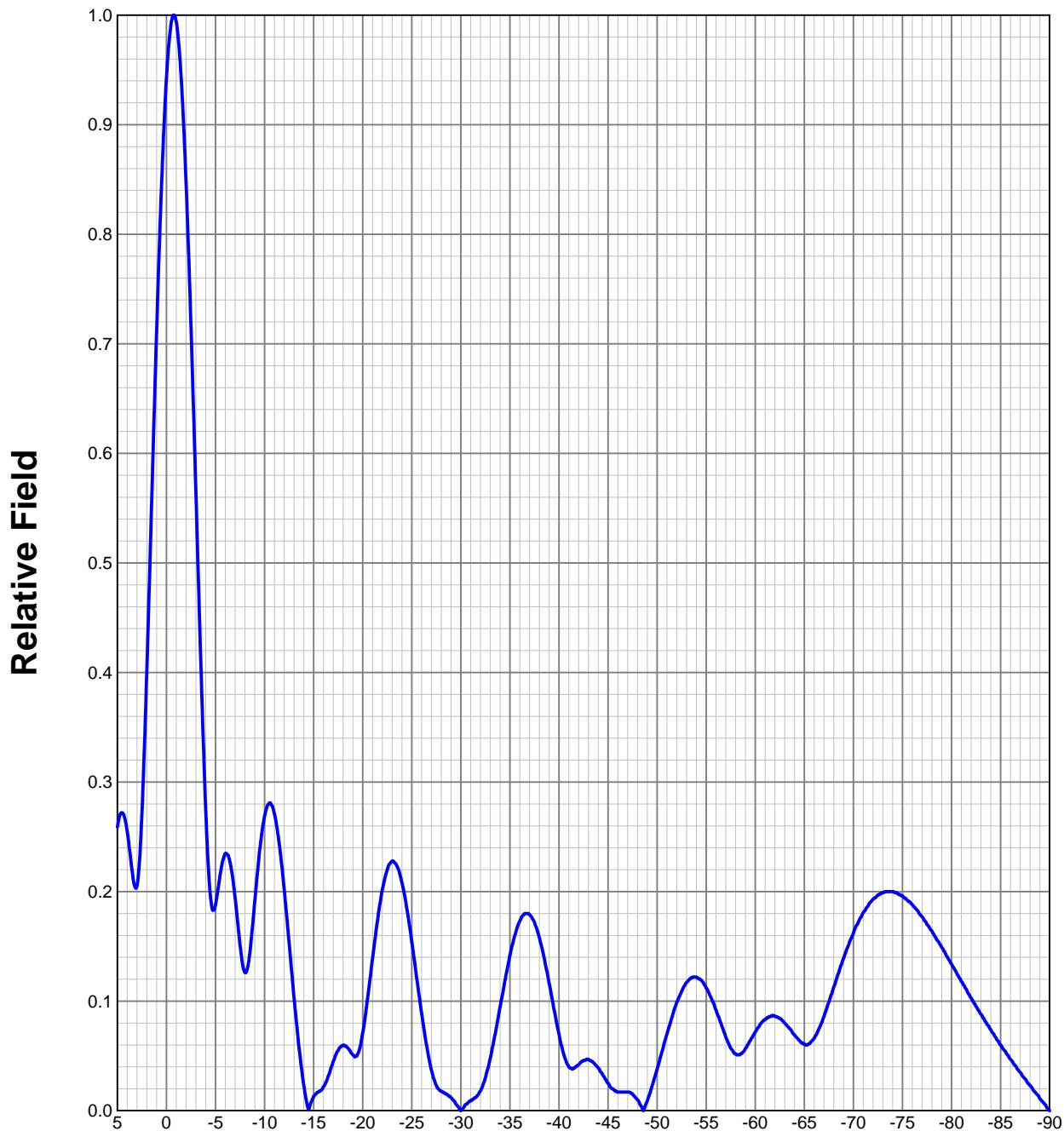
Type:	<u>ALP12L3</u>		Channel:	<u>40</u>
Directivity:	<u>Numeric</u>	<u>dBd</u>	Location:	
Main Lobe:	<u>12.64</u>	<u>11.02</u>	Beam Tilt:	<u>-0.75</u>
Horizontal:	<u>11.24</u>	<u>10.51</u>	Polarization:	<u>Horizontal</u>



*Preliminary, subject to final design and review.*

**ELEVATION PATTERN**

Type:	<u>ALP12L3</u>		Channel:	<u>40</u>
Directivity:	<u>Numeric</u>	<u>dBd</u>	Location:	
Main Lobe:	<u>12.64</u>	<u>11.02</u>	Beam Tilt:	<u>-0.75</u>
Horizontal:	<u>11.24</u>	<u>10.51</u>	Polarization:	<u>Horizontal</u>



*Preliminary, subject to final design and review.*

## TABULATED DATA FOR ELEVATION PATTERN

Type: ALP12L3

Polarization: Horizontal

ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB
5.00	0.259	-11.73	-6.75	0.212	-13.45	-27.00	0.037	-28.64	-50.50	0.054	-25.35
4.75	0.270	-11.39	-7.00	0.194	-14.24	-27.50	0.023	-32.77	-51.00	0.070	-23.10
4.50	0.272	-11.31	-7.25	0.172	-15.26	-28.00	0.018	-34.89	-51.50	0.085	-21.41
4.25	0.267	-11.47	-7.50	0.151	-16.42	-28.50	0.015	-36.48	-52.00	0.099	-20.09
4.00	0.255	-11.87	-7.75	0.134	-17.46	-29.00	0.012	-38.42	-52.50	0.109	-19.25
3.75	0.237	-12.49	-8.00	0.126	-17.99	-29.50	0.006	-44.44	-53.00	0.117	-18.64
3.50	0.219	-13.19	-8.25	0.130	-17.72	-30.00	0.000	-40.00	-53.50	0.121	-18.34
3.25	0.205	-13.74	-8.50	0.144	-16.83	-30.50	0.006	-44.44	-54.00	0.122	-18.27
3.00	0.205	-13.76	-8.75	0.167	-15.57	-31.00	0.009	-40.92	-54.50	0.119	-18.49
2.75	0.228	-12.86	-9.00	0.191	-14.38	-31.50	0.012	-38.42	-55.00	0.112	-19.02
2.50	0.271	-11.34	-9.25	0.215	-13.33	-32.00	0.018	-34.89	-55.50	0.103	-19.74
2.25	0.331	-9.60	-9.50	0.238	-12.47	-32.50	0.030	-30.46	-56.00	0.092	-20.72
2.00	0.402	-7.92	-9.75	0.256	-11.85	-33.00	0.048	-26.38	-56.50	0.080	-21.94
1.75	0.479	-6.40	-10.00	0.269	-11.40	-33.50	0.070	-23.10	-57.00	0.067	-23.48
1.50	0.558	-5.07	-10.50	0.281	-11.03	-34.00	0.095	-20.45	-57.50	0.057	-24.88
1.25	0.637	-3.92	-11.00	0.271	-11.34	-34.50	0.119	-18.49	-58.00	0.052	-25.68
1.00	0.712	-2.95	-11.50	0.243	-12.29	-35.00	0.142	-16.95	-58.50	0.052	-25.68
0.75	0.782	-2.13	-12.00	0.202	-13.89	-35.50	0.160	-15.92	-59.00	0.057	-24.88
0.50	0.845	-1.46	-12.50	0.153	-16.31	-36.00	0.173	-15.24	-59.50	0.064	-23.88
0.25	0.899	-0.92	-13.00	0.103	-19.74	-36.50	0.180	-14.89	-60.00	0.072	-22.85
0.00	0.943	-0.51	-13.50	0.058	-24.73	-37.00	0.179	-14.94	-60.50	0.079	-22.05
-0.25	0.974	-0.23	-14.00	0.023	-32.77	-37.50	0.172	-15.29	-61.00	0.083	-21.62
-0.50	0.994	-0.05	-14.50	0.001	-60.00	-38.00	0.158	-16.03	-61.50	0.086	-21.31
-0.75	1.000	0.00	-15.00	0.013	-37.72	-38.50	0.139	-17.14	-62.00	0.086	-21.31
-1.00	0.994	-0.05	-15.50	0.017	-35.39	-39.00	0.116	-18.71	-62.50	0.084	-21.51
-1.25	0.974	-0.23	-16.00	0.022	-33.15	-39.50	0.092	-20.72	-63.00	0.080	-21.94
-1.50	0.943	-0.51	-16.50	0.032	-29.90	-40.00	0.070	-23.10	-63.50	0.075	-22.50
-1.75	0.900	-0.92	-17.00	0.045	-26.94	-40.50	0.051	-25.85	-64.00	0.069	-23.22
-2.00	0.847	-1.44	-17.50	0.055	-25.19	-41.00	0.040	-27.96	-64.50	0.064	-23.88
-2.25	0.785	-2.10	-18.00	0.060	-24.44	-41.50	0.039	-28.18	-65.00	0.061	-24.29
-2.50	0.716	-2.90	-18.50	0.057	-24.88	-42.00	0.042	-27.54	-65.50	0.061	-24.29
-2.75	0.642	-3.85	-19.00	0.051	-25.85	-42.50	0.046	-26.74	-66.00	0.066	-23.61
-3.00	0.565	-4.96	-19.50	0.052	-25.68	-43.00	0.047	-26.56	-66.50	0.075	-22.50
-3.25	0.486	-6.26	-20.00	0.071	-22.97	-43.50	0.044	-27.13	-67.00	0.086	-21.31
-3.50	0.410	-7.74	-20.50	0.103	-19.74	-44.00	0.039	-28.18	-67.50	0.099	-20.09
-3.75	0.339	-9.41	-21.00	0.139	-17.14	-44.50	0.032	-29.90	-68.00	0.113	-18.94
-4.00	0.275	-11.21	-21.50	0.173	-15.24	-45.00	0.025	-32.04	-68.50	0.126	-17.99
-4.25	0.226	-12.94	-22.00	0.202	-13.89	-45.50	0.020	-33.98	-69.00	0.139	-17.14
-4.50	0.194	-14.24	-22.50	0.220	-13.15	-46.00	0.017	-35.39	-69.50	0.151	-16.42
-4.75	0.183	-14.75	-23.00	0.228	-12.84	-46.50	0.017	-35.39	-70.00	0.162	-15.81
-5.00	0.188	-14.52	-23.50	0.223	-13.03	-47.00	0.017	-35.39	-70.50	0.172	-15.29
-5.25	0.202	-13.89	-24.00	0.208	-13.64	-47.50	0.015	-36.48	-71.00	0.181	-14.85
-5.50	0.217	-13.27	-24.50	0.184	-14.70	-48.00	0.010	-40.00	-71.50	0.187	-14.56
-5.75	0.229	-12.82	-25.00	0.154	-16.25	-48.50	0.002	-53.98	-72.00	0.193	-14.29
-6.00	0.235	-12.58	-25.50	0.121	-18.34	-49.00	0.009	-40.92	-72.50	0.197	-14.11
-6.25	0.234	-12.63	-26.00	0.089	-21.01	-49.50	0.023	-32.77	-73.00	0.199	-14.02
-6.50	0.226	-12.92	-26.50	0.060	-24.44	-50.00	0.038	-28.40	-73.50	0.200	-13.98

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