Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Special Displacement Window Application

LPTV or Translator Facility:	KVPA-LD Facility ID 33773 Phoenix, AZ Licensed Ch. 42 File# BLDTL-20100216AAT
Nature of Displacement:	Within 600 MHz wireless spectrum
Proposed Facility:	Ch. 34 15 kW ERP directional (azimuth pattern in Figure 1)
Modification Compliance:	0.0 km from licensed site Contour comparison in Figure 2 TVStudy Analysis report in Table 1 (Study cell size: 1.00 km Profile point spacing: 0.10 km) Proposed KVPA-LD displacement has priority over the following application for a new LPTV station: New Ch. 34 Buckeye AZ BMJADTL-20100524AGK
Contingent Application Rule:	No waiver required, not dependent on spectrum to be vacated
RF Exposure:	Following construction of the proposed facility, the applicant will conduct RF exposure measurements to evaluate the level of RF exposure resulting from the proposed facility. As necessary, based on these results and considering all emitters, appropriate exposure abatement procedures will be established and followed, in order to comply with the FCC's exposure limits. Such abatement procedures may involve the restriction of access to certain areas and/or facility modifications to reduce RF levels.

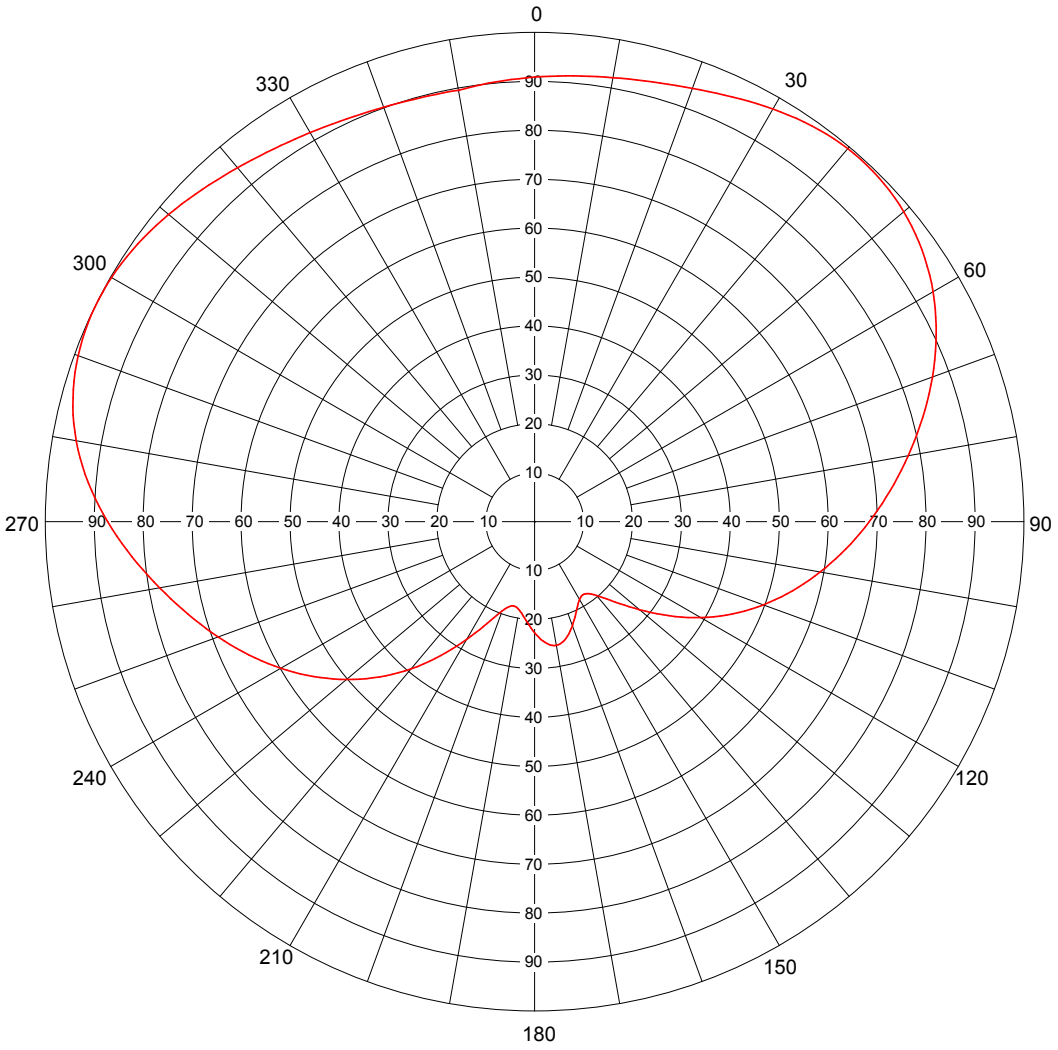
Chesapeake RF Consultants, LLC
Joseph M. Davis, P.E. May 6, 2018
207 Old Dominion Road Yorktown, VA 23692 703-650-9600

Dielectric

Date	**06 May 2018**		
Call Letters		Channel	**34**
Location			
Customer			
Antenna Type	**TLP-8M**		

AZIMUTH PATTERN

Gain	**1.90 (2.79 dB)**	Frequency	**593 MHz**
Calculated / Measured	**Calculated**	Drawing #	**TLP-M**



Remarks:

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Figure 1
Antenna Azimuthal Pattern
KVPA-LD Phoenix, AZ
Facility ID 33773
Ch. 34 (digital) 15 kW

prepared for
KRCA License LLC

May, 2018

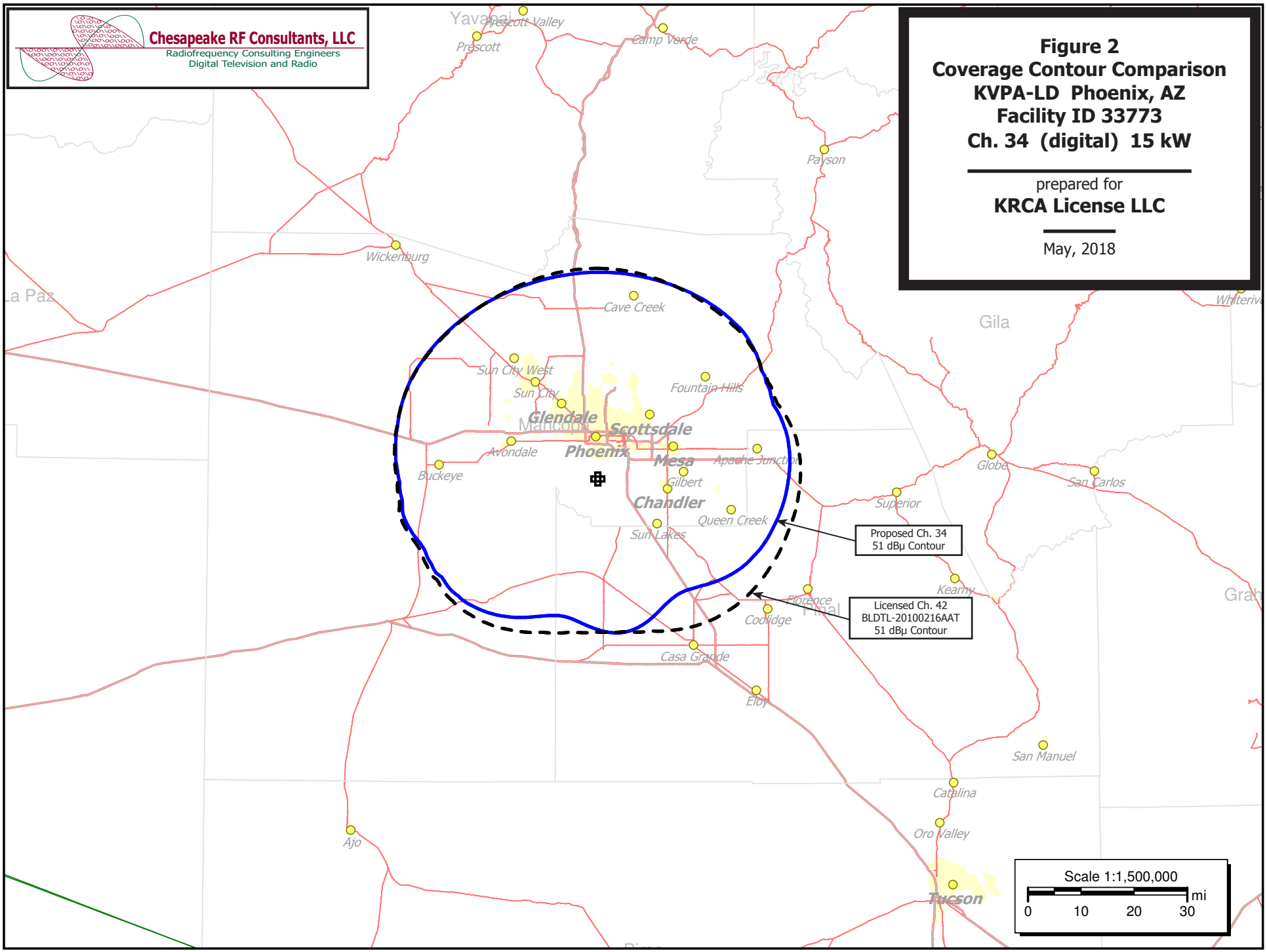

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Figure 2
Coverage Contour Comparison
KVPA-LD Phoenix, AZ
Facility ID 33773
Ch. 34 (digital) 15 kW
prepared for
KRCA License LLC
May, 2018
Proposed Ch. 34
51 dBµ Contour
Licensed Ch. 42
BLDTL-20100216AAT
51 dBµ Contour
Scale 1:1,500,000
mi
0
10
20
30
Yavapai
Prescott
Prescott Valley
Camp Verde
Payson
Wickenburg
La Paz
Cave Creek
Gila
Sun City West
Sun City
Fountain Hills
Glendale
Scottsdale
Phoenix
Mesa
Avondale
Buckeye
Apache Junction
Gilbert
Chandler
Queen Creek
Sun Lakes
Globe
San Carlos
Superior
Kearny
Florence
Coolidge
Casa Grande
Eloy
San Manuel
Catalina
Oro Valley
Ajo
Tucson

Table 1 KVPA-LD TVStudy Analysis of Proposal

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```
tvstudy v2.2.5 (4uoc83)
Database: localhost,  Study: KVPA-LD 34 TLP-M prop,  Model: Longley-Rice
Start: 2018.05.06 12:19:48

Study created: 2018.05.06 12:19:48

Study build station data: LMS TV 2018-05-06

    Proposal: KVPA-LD D34 LD APP PHOENIX, AZ
 File number: KVPA-LD 34 TLP-M prop
 Facility ID: 33773
Station data: User record
   Record ID: 2040
     Country: U.S.

Build options:
Protect pre-transition records not on baseline channel

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:
```

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K19FD	N19+	TX	LIC	CAMP VERDE, AZ	BLTTL20050506ACT	127.1 km
No	K20IA	N20-	TX	LIC	PRESCOTT, AZ	BLTTL20110711AAR	159.3
No	KYPO-LP	N27	TX	LIC	TACNA, AZ	BLTTL20080818AAL	156.2
No	K44CN-D	D33	LD	APP	COTTONWOOD, AZ	BLANK0000034866	150.6
No	KTVW-DT	D33	DT	APP	PHOENIX, AZ	BLANK0000035666	0.3
No	KTVW-DT	D33	DT	LIC	PHOENIX, AZ	BLCDT20100818ABA	0.3
No	K33MD-D	D33	LD	CP	YUMA, AZ	BNPDTL20100922AAO	224.0
No	K33MD-D	D33	LD	LIC	YUMA, AZ	BLDTL20150206AAR	224.0
Yes	NEW	D34	LD	APP	BUCKEYE, AZ	BMJADTL20100524AGK	131.0
No	K43GU-D	D34	LD	APP	DOLAN SPRINGS, AZ	BLANK0000053730	321.2
Yes	KUVE-DT	D34	DT	CP	GREEN VALLEY, AZ	BLANK0000034005	162.1
No	K34EF-D	D34	LD	LIC	KINGMAN, AZ	BLDTT20130308ABG	257.5
No	K34MT-D	D34	LD	CP	LAKE HAVASU, AZ	BNPDTL20100510ADI	245.1
Yes	K34EE-D	D34	LD	LIC	PRESCOTT-COTTONWOOD, AZ	BLDTT20120521ACZ	150.6
No	K21GC	D34	LD	CP	SAFFORD, AZ	BDISDTT20090630AAH	220.2
No	NEW	D34	LD	APP	WELLTON, AZ	BNPDTL20100510AAK	194.9
No	K42AC-D	D35	LD	APP	COTTONWOOD, ETC., AZ	BLANK0000035577	150.6
No	KFPH-CD	D35	DC	LIC	PHOENIX, AZ	BLDTA20110405AAY	0.3

```
No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D34
       Mask: Full Service
   Latitude:  33 19 57.10 N (NAD83)
  Longitude: 112  3 59.50 W
Height AMSL: 822.6 m (Adjusted based on actual ground elevation calculation)
       HAAT: 0.0 m
   Peak ERP: 15.0 kW
    Antenna: DIE TLP-M 350.0 deg
Elev Pattrn: Generic
  Elec Tilt: 2.00

50.7 dBu contour:
Azimuth      ERP       HAAT   Distance
  0.0 deg   12.4 kW   483.0 m   63.1 km
 45.0       14.8      446.5     63.0
 90.0        7.02     436.8     58.1
135.0       0.853     463.2     46.1
180.0       0.773     478.0     46.1
225.0        3.00     484.3     54.6
270.0        11.4     430.1     60.7
315.0        13.8     496.7     64.2

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m   Computed HAAT: 465 m
```

Distance to Canadian border: 1741.3 km

**Proposal is within coordination distance of Mexican border
Distance to Mexican border: 175.8 km

Conditions at FCC monitoring station: Douglas AZ
Bearing: 131.3 degrees Distance: 304.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 36.8 degrees Distance: 967.4 km

Study cell size: 1.00 km
Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BMJADTL20100524AGK APP scenario 1
**MX: 10.37% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	NEW	D34	LD	APP	BUCKEYE, AZ	BMJADTL20100524AGK	
Undesireds:	KVPA-LD	D34	LD	APP	PHOENIX, AZ	KVPA-LD 34 TLP-M prop	131.0 km
	KTVW-DT	D33	DT	APP	PHOENIX, AZ	BLANK0000035666	131.2
	K33MD-D	D33	LD	CP	YUMA, AZ	BNPDTL20100922AAO	122.8
	K34EF-D	D34	LD	LIC	KINGMAN, AZ	BLDTT20130308ABG	180.3
	NEW	D34	LD	APP	WELLTON, AZ	BNPDTL20100510AAK	103.3
	K34EU	N34-	TX	LIC	MORONGO VALLEY, CA	BLTTL19970721JR	291.5
	NEW	D35	LD	APP	PARKER, AZ	BNPDTL20100514AEI	58.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
11213.5	8,591	8383.9	6,755	8219.4	6,578	8091.4	5,896	1.56	10.37

Undesired		Total IX		Unique IX, before		Unique IX, after	
KVPA-LD D34 LD APP	132.9	682				128.0	682
KTVW-DT D33 DT APP	1.0	0		1.0	0	0.0	0
K34EF-D D34 LD LIC	118.7	166		115.7	166	113.7	166
NEW D34 LD APP	41.9	11		41.9	11	41.9	11
NEW D35 LD APP	5.9	0		3.0	0	2.0	0

Interference to BMJADTL20100524AGK APP scenario 2
**MX: 10.37% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	NEW	D34	LD	APP	BUCKEYE, AZ	BMJADTL20100524AGK	
Undesireds:	KVPA-LD	D34	LD	APP	PHOENIX, AZ	KVPA-LD 34 TLP-M prop	131.0 km
	K33MD-D	D33	LD	CP	YUMA, AZ	BNPDTL20100922AAO	122.8
	K34EF-D	D34	LD	LIC	KINGMAN, AZ	BLDTT20130308ABG	180.3
	NEW	D34	LD	APP	WELLTON, AZ	BNPDTL20100510AAK	103.3
	K34EU	N34-	TX	LIC	MORONGO VALLEY, CA	BLTTL19970721JR	291.5
	NEW	D35	LD	APP	PARKER, AZ	BNPDTL20100514AEI	58.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
11213.5	8,591	8383.9	6,755	8220.4	6,578	8091.4	5,896	1.57	10.37

Undesired		Total IX		Unique IX, before		Unique IX, after	
KVPA-LD D34 LD APP	132.9	682				129.0	682
K34EF-D D34 LD LIC	118.7	166		115.7	166	113.7	166
NEW D34 LD APP	41.9	11		41.9	11	41.9	11
NEW D35 LD APP	5.9	0		3.0	0	2.0	0

Interference to BLANK0000034005 CP scenario 1

Table 1 KVPA-LD TVStudy Analysis of Proposal

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	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KUVE-DT	D34	DT	CP	GREEN VALLEY, AZ	BLANK0000034005	
Undesireds:	KVPA-LD	D34	LD	APP	PHOENIX, AZ	KVPA-LD 34 TLP-M prop	162.1 km
	KTVW-DT	D33	DT	APP	PHOENIX, AZ	BLANK0000035666	162.0
	KFPH-CD	D35	DC	LIC	PHOENIX, AZ	BLDTA20110405AAY	162.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
41165.6	1,295,048	29747.3	923,931	29676.5	923,891	29284.7	922,688	1.32	0.13
480.6	129,440	276.4	59,489	276.4	59,489	276.4	59,489	0.00	0.00

(in Mexico)

Undesired	Total IX	Unique IX, before		Unique IX, after	
KVPA-LD D34 LD APP	460.6	1,243		391.8	1,203
KTVW-DT D33 DT APP	70.8	40	26.9	40	1.0	0
KFPH-CD D35 DC LIC	43.9	0	0.0	0	0.0	0

Interference to BLANK0000034005 CP scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KUVE-DT	D34	DT	CP	GREEN VALLEY, AZ	BLANK0000034005	
Undesireds:	KVPA-LD	D34	LD	APP	PHOENIX, AZ	KVPA-LD 34 TLP-M prop	162.1 km
	KTVW-DT	D33	DT	LIC	PHOENIX, AZ	BLCDT20100818ABA	162.0
	KFPH-CD	D35	DC	LIC	PHOENIX, AZ	BLDTA20110405AAY	162.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
41165.6	1,295,048	29747.3	923,931	29681.5	923,891	29285.7	922,688	1.33	0.13
480.6	129,440	276.4	59,489	276.4	59,489	276.4	59,489	0.00	0.00

(in Mexico)

Undesired	Total IX	Unique IX, before		Unique IX, after	
KVPA-LD D34 LD APP	460.6	1,243		395.8	1,203
KTVW-DT D33 DT LIC	65.8	40	22.0	40	0.0	0
KFPH-CD D35 DC LIC	43.9	0	0.0	0	0.0	0

Interference to BLDTT20120521ACZ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K34EE-D	D34	LD	LIC	PRESCOTT-COTTONWOOD, AZ	BLDTT20120521ACZ	
Undesireds:	KVPA-LD	D34	LD	APP	PHOENIX, AZ	KVPA-LD 34 TLP-M prop	150.6 km
	K44CN-D	D33	LD	APP	COTTONWOOD, AZ	BLANK0000034866	0.1
	KUVE-DT	D34	DT	CP	GREEN VALLEY, AZ	BLANK0000034005	283.8
	K34ME-D	D34	LD	LIC	OVERTON, NV	BLDTT20120309ACT	310.6
	K34CX-D	N34	TX	LIC	APPLE VALLEY, UT	BLTTL19910709IY	285.1
	K42AC-D	D35	LD	APP	COTTONWOOD, ETC., AZ	BLANK0000035577	0.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
6409.3	127,672	5350.7	103,378	5310.5	100,370	5309.5	100,370	0.02	0.00

Undesired	Total IX	Unique IX, before		Unique IX, after	
KVPA-LD D34 LD APP	10.0	0		1.0	0
K44CN-D D33 LD APP	33.2	1,208	19.1	622	19.1	622
KUVE-DT D34 DT CP	9.0	25	3.0	25	2.0	25
K42AC-D D35 LD APP	18.1	2,361	4.0	1,775	3.0	1,775

Interference to proposal scenario 1
**MX: 26.90% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KVPA-LD	D34	LD	APP	PHOENIX, AZ	KVPA-LD 34 TLP-M prop	
Undesireds:	KTVW-DT	D33	DT	APP	PHOENIX, AZ	BLANK0000035666	0.3 km
	NEW	D34	LD	APP	BUCKEYE, AZ	BMJADTL20100524AGK	131.0
	KUVE-DT	D34	DT	CP	GREEN VALLEY, AZ	BLANK0000034005	162.1
	K21GC	D34	LD	CP	SAFFORD, AZ	BDISDTT20090630AAH	220.2
	KFPH-CD	D35	DC	LIC	PHOENIX, AZ	BLDTA20110405AAY	0.3

Service area	Terrain-limited	IX-free	Percent IX

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10271.9	3,980,884	8248.8	3,856,731	6289.7	2,819,232	23.75	26.90

Undesired		Total IX		Unique IX		Prcnt Unique IX	
KTVW-DT D33 DT APP	124.8	27,429	19.8	2,186	0.24	0.06
NEW D34 LD APP	21.8	1,423	15.9	1,261	0.19	0.03
KUVE-DT D34 DT CP	1859.9	1,017,063	1796.6	989,872	21.78	25.67
K21GC D34 LD CP	17.9	12,741	3.0	1,461	0.04	0.04
KFPH-CD D35 DC LIC	95.1	27,868	4.0	6,196	0.05	0.16

Interference to proposal scenario 2
**MX: 26.90% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KVPA-LD	D34	LD	APP	PHOENIX, AZ	KVPA-LD 34 TLP-M prop	
Undesireds:	KTVW-DT	D33	DT	LIC	PHOENIX, AZ	BLCDT20100818ABA	0.3 km
	NEW	D34	LD	APP	BUCKEYE, AZ	BMJADTL20100524AGK	131.0
	KUVE-DT	D34	DT	CP	GREEN VALLEY, AZ	BLANK0000034005	162.1
	K21GC	D34	LD	CP	SAFFORD, AZ	BDISDTT20090630AAH	220.2
	KFPH-CD	D35	DC	LIC	PHOENIX, AZ	BLDTA20110405AAY	0.3

Service area		Terrain-limited		IX-free		Percent IX	
10271.9	3,980,884	8248.8	3,856,731	6289.7	2,819,232	23.75	26.90

Undesired		Total IX		Unique IX		Prcnt Unique IX	
KTVW-DT D33 DT LIC	122.9	27,409	19.8	2,186	0.24	0.06
NEW D34 LD APP	21.8	1,423	15.9	1,261	0.19	0.03
KUVE-DT D34 DT CP	1859.9	1,017,063	1798.5	989,892	21.80	25.67
K21GC D34 LD CP	17.9	12,741	3.0	1,461	0.04	0.04
KFPH-CD D35 DC LIC	95.1	27,868	4.0	6,196	0.05	0.16