

ENGINEERING EXHIBIT

Application for Television Translator Digital Flash-Cut Construction Permit

prepared for

Bluestone License Holdings Inc.

K03FU Mountain Gate, Etc., CA

Facility ID 8323

Ch. 3 (digital) 0.3 kW

Bluestone License Holdings Inc. (“*Bluestone*”) is the licensee of television translator station K03FU, analog Channel 3, Mountain Gate, Etc., CA, Facility ID 8323 (BLTTV-19810713IN). *Bluestone* herein proposes herein to flash-cut K03FU to digital operation.

The proposed facility will operate on the current K03FU Channel 3 as digital at 0.3 kW effective radiated power using a “simple” out of channel emission mask. Corrected site coordinates and elevation data are provided herein. Figure 1 depicts the coverage contour of the proposed facility as well as that of the K03FU licensed analog facility. The use of the same transmitter site and the service area overlap shown demonstrate compliance with §73.3572 for a minor change.

The proposed digital facility will employ the existing transmitting antenna (Scala model HDCA-5 array) associated with the licensed analog operation. The antenna supporting structure does not have an FCC Antenna Structure Registration number since its overall height is less than 60 meters and there are no known landing areas within 8 km of the site. No change to the overall structure height is proposed.

A detailed interference study per OET Bulletin 69¹ shows that the proposal complies with the Commission’s interference protection requirements toward all digital television, television

¹FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 (“OET-69”). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A cell size of 1 km was employed. Comparisons of various results of this computer program (run on a Sun Sparc processor) to the Commission’s implementation of OET-69 show excellent correlation.

translator, low power television, and Class A television stations. The results, summarized in Table 1, show that any new interference does not exceed the Commission's interference limits (0.5 percent to full power and Class A stations, and 2.0 percent to secondary stations).

The nearest FCC monitoring station is 339 km distant at Livermore, CA. This exceeds by a large margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with "quiet" zones specified in §73.1030(a) and (b). There are no authorized AM stations within 3.2 kilometers of the site. The site location is beyond the border zones that would require international coordination.

Human Exposure to Radiofrequency Electromagnetic Field

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number. 65. Based on OET-65 equation (10) and considering the antenna's theoretical elevation pattern, the maximum calculated signal density near the antenna structure at two meters above ground level attributable to the proposed facility is $62.8 \mu\text{W}/\text{cm}^2$, which is 31.4 percent of the general population/uncontrolled maximum permitted exposure limit. No other authorized TV, FM, or AM facilities are located within 5 km of the site, according to CDBS data.

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. The applicant will coordinate exposure procedures with any pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, mast or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

This exhibit is limited to the evaluation of exposure to RF electromagnetic field. The K03FU transmitting antenna is mounted on an antenna support structure which was constructed prior to March 16, 2001. No tower work or change in structure height is proposed.

Certification

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direction, and that they are true and correct to the best of his knowledge and belief.



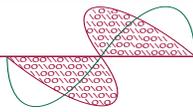
Joseph M. Davis, P.E.
August 11, 2011

Chesapeake RF Consultants, LLC
207 Old Dominion Road
Yorktown, VA 23692
703-650-9600

List of Attachments

Figure 1	Coverage Contour Comparison
Table 1	Interference Analysis Results Summary
Form 346	Saved Version of Engineering Sections from FCC Form at Time of Upload

This material was entered August 11, 2011 for filing electronically. Since the FCC's electronic filing system may be accessed by anyone with the applicant's account number and password, and electronic data may otherwise be altered in an unauthorized fashion, we cannot be responsible for changes made subsequent to our entry of this data and related attachments.



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

Figure 1
Coverage Contour Comparison
K03FU Mountain Gate, Etc., CA
Facility ID 8323
Ch. 3 (digital) 0.3 kW

prepared for
Bluestone License Holdings Inc.

August, 2011

Proposed K03FU
Digital Flashcut Ch. 3
43 dBu Contour

Licensed K03FU
Analog Ch. 3
62 dBu Contour

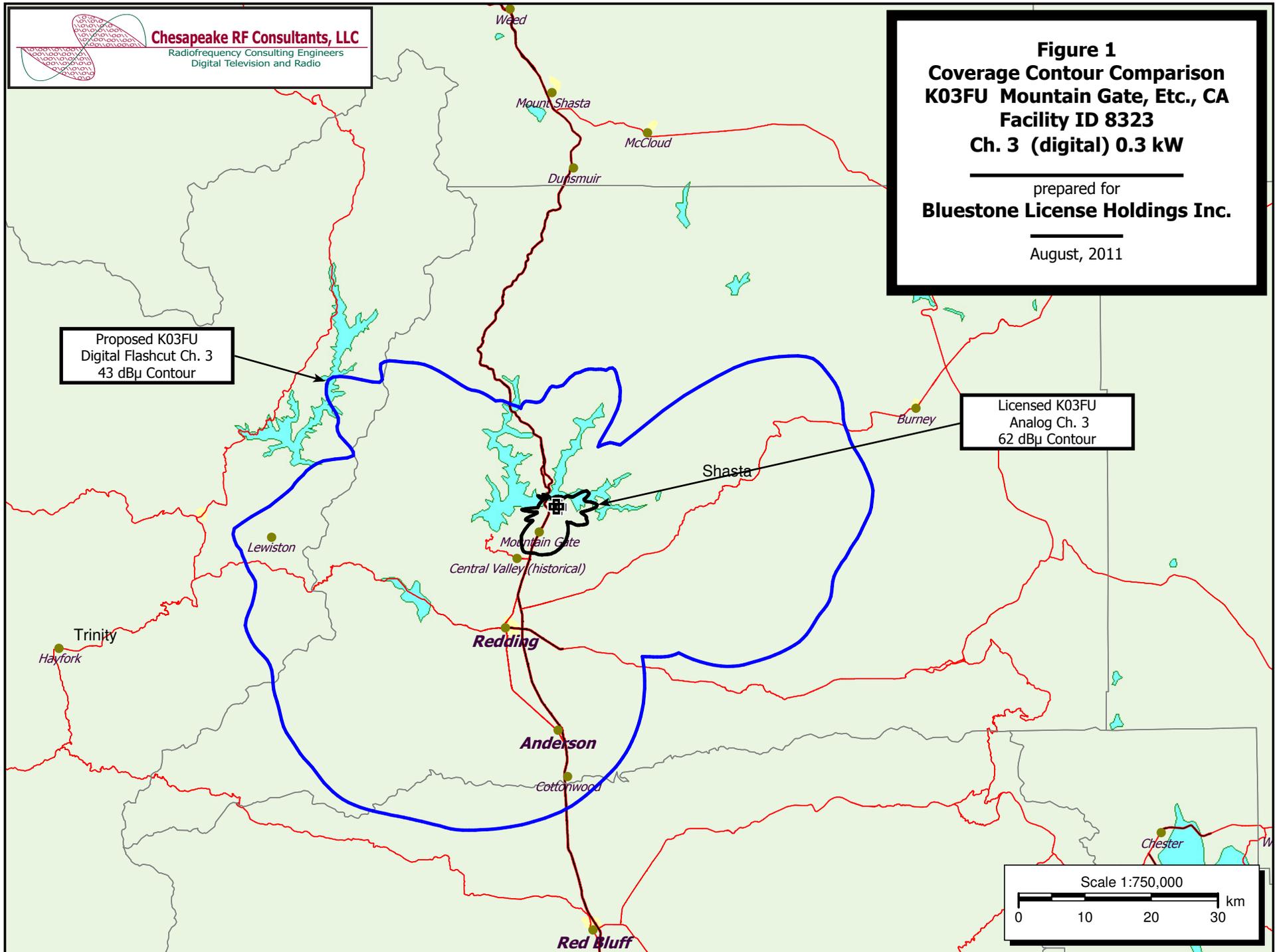


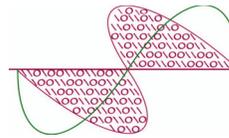
Table 1

Interference Analysis Results Summary

prepared for

Bluestone License Holdings Inc.

K03FU Mountain Gate, Etc., CA



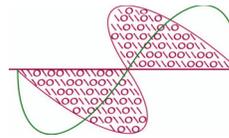
Chesapeake RF Consultants, LLC

Radiofrequency Consulting Engineers
Digital Television and Radio

K03FU-D USERRECORD-01 MOUNTAIN GATE, ETC. CA US
 Channel 03 ERP 0.3 kW HAAT 338. m RCAMSL 00739 m SIMPLE MASK
 Latitude 040-45-03 Longitude 0122-18-03
 Dir Antenna Make CDB Model 00000000022876 Beam tilt N Ref Azimuth 0.

Ch.	Call	City/State	Dist (km)	Status	Application Ref. No.	---Population (2000 Census)---	
						Baseline	New Interference
2	K02OA	CHICO CA	101.3	LIC	BLTVL-20071119AFF	---	none
2	K02CN	DUNSMUIR, ETC. CA	52.7	LIC	BLTTV-4615	---	none
2	K02FF	LAKEHEAD CA	14.8	LIC	BLTTV-3832	858	0 (0.00%)
2	K02QO-D	SANTA ROSA CA	225.0	CP	BNPDVL-20090825BGE	---	none
2	K02OD	SHELTER COVE CA	167.4	LIC	BLTTV-19920813JE	---	none
2	K02EE-D	WEAVERVILLE CA	57.3	LIC	BLDTV-20080930AEI	---	none
2	K02EK	APPEGATE VALLEY OR	174.3	LIC	BLTTV-1105	---	none
2	K02DV	CAVE JUNCTION, ETC. OR	192.8	LIC	BLTTV-3706	---	none
2	K02FT	GOLD HILL OR	195.3	LIC	BLTTV-4699	---	none
2	K02IC	JACKSONVILLE OR	185.0	LIC	BLTTV-4657	---	none
2	K02JG	PROSPECT OR	221.2	CP	BDFCDTV-20101022AAU	---	none
2	K02JG	PROSPECT OR	221.1	LIC	BLTTV-19790226IA	---	none
2	K02JJ	WILLIAMS OR	177.9	LIC	BLTTV-19781030IM	---	none
2	K02JJ	WILLIAMS OR	198.6	CP	BDFCDTV-20110110AAM	---	none
3	K03HX-D	ETNA CA	95.3	LIC	BLDTV-20081001ACJ	---	none
3	KIEM-TV	EUREKA CA	139.1	CP	BPCDT-20080617ADN	152,736	627 (0.41%)
3	K03CT	LEWISTON, ETC. CA	45.2	LIC	BLTTV-4961	---	none
3	K14MW-D	PETALUMA CA	314.6	CP MOD	BMPDVL-20090921ACG	---	none
3	K14MW-D	PETALUMA CA	333.2	APP	BMPDVL-20101208ADX	---	none
3	KCSO-LD	SACRAMENTO CA	322.3	LIC	BLDVL-20100825AAQ	---	none
3	KCSO-LD	SACRAMENTO CA	322.3	APP	BPDVL-20101102ABA	---	none
3	KCSO-LD	SACRAMENTO CA	322.3	APP	BSTA-20110516ABP	---	none
3	K03IC-D	SANTA ROSA CA	225.0	CP	BNPDVL-20090825BFY	---	none
3	NEW	RENO NV	249.0	APP	BNPDVL-20100614ARF	---	none
3	NEW	EUGENE OR	372.9	APP	BNPDVL-20100518AAO	---	none
3	K03CQ	MAPLETON OR	388.0	LIC	BLTTV-1798	---	none
3	K03BZ	ROGUE RIVER OR	202.7	LIC	BLTTV-4263	---	none
3	K03EI	TOLO, ETC. OR	186.4	LIC	BLTTV-20070503AAQ	---	none
4	K04EZ	BIG BEND, ETC. CA	41.5	LIC	BLTTV-1168	---	none
4	K04EQ	FORT JONES, ETC. CA	95.3	LIC	BLTTV-3876	---	none
4	K04NX	GARBERVILLE, ETC. CA	146.7	LIC	BLTTV-19900518IC	---	none

Table 1
Interference Analysis Results Summary
 (page 2 of 2)



Chesapeake RF Consultants, LLC

Radiofrequency Consulting Engineers
 Digital Television and Radio

Ch.	Call	City/State	Dist (km)	Status	Application Ref. No.	---Population (2000 Census)---	
						Baseline	New Interference
4	K04FL	LAKESHORE, ETC. CA	21.9	LIC	BLTTV-4744	---	none
4	K04QC	PALERMO CA	155.7	LIC	BLTVL-20050114ADZ	---	none
4	KVFR-LP	REDDING CA	16.9	LIC	BLTVL-20071228ABV	3,576	0 (0.00%)
4	K04NY	RIO DELL CA	156.0	LIC	BLTTV-19901121IG	---	none
4	K04NU	SEIAD VALLEY CA	144.2	LIC	BLTTV-19891211IC	---	none
4	K04DD-D	WEAVERVILLE CA	57.3	LIC	BLDTV-20090608AAF	---	none
4	K04HE	YREKA, ETC. CA	115.8	LIC	BLTTV-19950612IG	---	none
4	K04ER	APPLEGATE VALLEY OR	174.3	LIC	BLTTV-1797	---	none
4	K04EO	ASHLAND, ETC. OR	175.7	LIC	BLTTV-4907	---	none
4	K04JQ	BUTTE FALLS OR	203.8	LIC	BLTTV-19800702IC	---	none
4	K04JZ	GOLD HILL OR	195.3	LIC	BLTTV-19810526ID	---	none
4	K04EY	GRANTS PASS, ETC. OR	201.7	LIC	BLTTV-19790222IC	---	none
4	K04EY	GRANTS PASS, ETC. OR	201.8	CP	BDFCDTV-20091109ABH	---	none
4	K04JP	WILLIAMS OR	177.9	LIC	BLTTV-19800702IB	---	none

SECTION III - ENGINEERING DATA (Digital)

TECHNICAL SPECIFICATIONS
 Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1. Channel Number:
3

2. Translator Input Channel No. : 7

3. Primary station proposed to be rebroadcast:

Facility Identifier	Call Sign	City	State	Channel
8291	KRCR-TV	REDDING	CA	7

4. Antenna Location Coordinates: (NAD 27)
 Latitude:
 Degrees 40 Minutes 45 Seconds 3 North South
 Longitude:
 Degrees 122 Minutes 18 Seconds 3 West East

5. Antenna Structure Registration Number:
 Not Applicable [Exhibit 10] Notification filed with FAA

6. Antenna Location Site Elevation Above Mean Sea Level: 731.5 meters

7. Overall Tower Height Above Ground Level: 7 meters

8. Height of Radiation Center Above Ground Level: 7 meters

9. Maximum Effective Radiated Power (ERP): 0.3 kW

10. Transmitter Output Power: 0.097 kW

11. a. Transmitting Antenna:
 Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under [CDBS Public Access](http://licensing.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm) (http://licensing.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search.
 Nondirectional Directional "Off-the-shelf" Directional composite
 Manufacturer SCA Model HDCA-5 (ARRAY OF 3)

b. Electrical Beam Tilt: degrees Not Applicable

c. Directional Antenna Relative Field Values: N/A (Nondirectional or Directional "Off-the-shelf")
 Rotation (Degrees): No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0	0.1	10	0.11	20	0.12	30	0.2	40	0.4	50	0.49
60	0.64	70	0.7	80	0.74	90	0.722	100	0.69	110	0.59
120	0.46	130	0.32	140	0.16	150	0.12	160	0.24	170	0.36
180	0.48	190	0.58	200	0.66	210	0.78	220	0.92	230	0.98
240	0.99	250	0.96	260	0.9	270	0.8	280	0.7	290	0.59
300	0.45	310	0.3	320	0.18	330	0.09	340	0.06	350	0.09
Additional Azimuths	237	1									

[Relative Field Polar Plot](#)

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

12. Out-of-channel Emission Mask: Simple Stringent

CERTIFICATION

13. **Interference** : The proposed facility complies with all of the following applicable rule sections. 47.C.F.R Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030. Yes No
 See Explanation in [Exhibit 11]

14. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine RF compliance, an **Exhibit is required.** Yes No
 See Explanation in [Exhibit 12]
 By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

15. **Channels 52-59.** If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable:

The applicant is applying for a digital companion channel for which no suitable channel from channel 2-51 is available.

Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.

16. **Channels 60-69.** If the proposed channel is within channels 60-69, the applicant certifies compliance with the following requirements, as applicable:

Pursuant to Section 74.786(e), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.

Pursuant to Section 74.786(e), the applicant proposing operation on channel 63, 64, 68 and 69 ("public safety channels") has secured a coordinated spectrum use agreements(s) with 700 MHz public safety regional planning committee(s) and state administrator(s) of the region(s) and state(s) within which the antenna site of the digital LPTV or TV translator station is proposed to locate, and those adjoining regions and states with boundaries within 75 miles of the proposed station location.

Pursuant to Section 74.786(e), the applicant for a channel adjacent to channel 63, 64, 68 or 69 has notified, within 30 days of filing this application, the 700 MHz public safety regional planning committee(s) and state administrator(s) of the region and state containing the proposed digital LPTV or TV translator antenna site and regions and states whose geographic boundaries lie within 50 miles of the proposed LPTV or TV translator antenna site.

PREPARERS CERTIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name JOSEPH M. DAVIS, P.E.		Relationship to Applicant (e.g., Consulting Engineer) CONSULTING ENGINEER	
Signature		Date 8/11/2011	
Mailing Address CHESAPEAKE RF CONSULTANTS, LLC 207 OLD DOMINION ROAD			
City YORKTOWN		State or Country (if foreign address) VA	Zip Code 23692 -
Telephone Number (include area code) 7036509600		E-Mail Address (if available) JOSEPH.DAVIS@RF-CONSULTANTS.COM	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

Exhibits

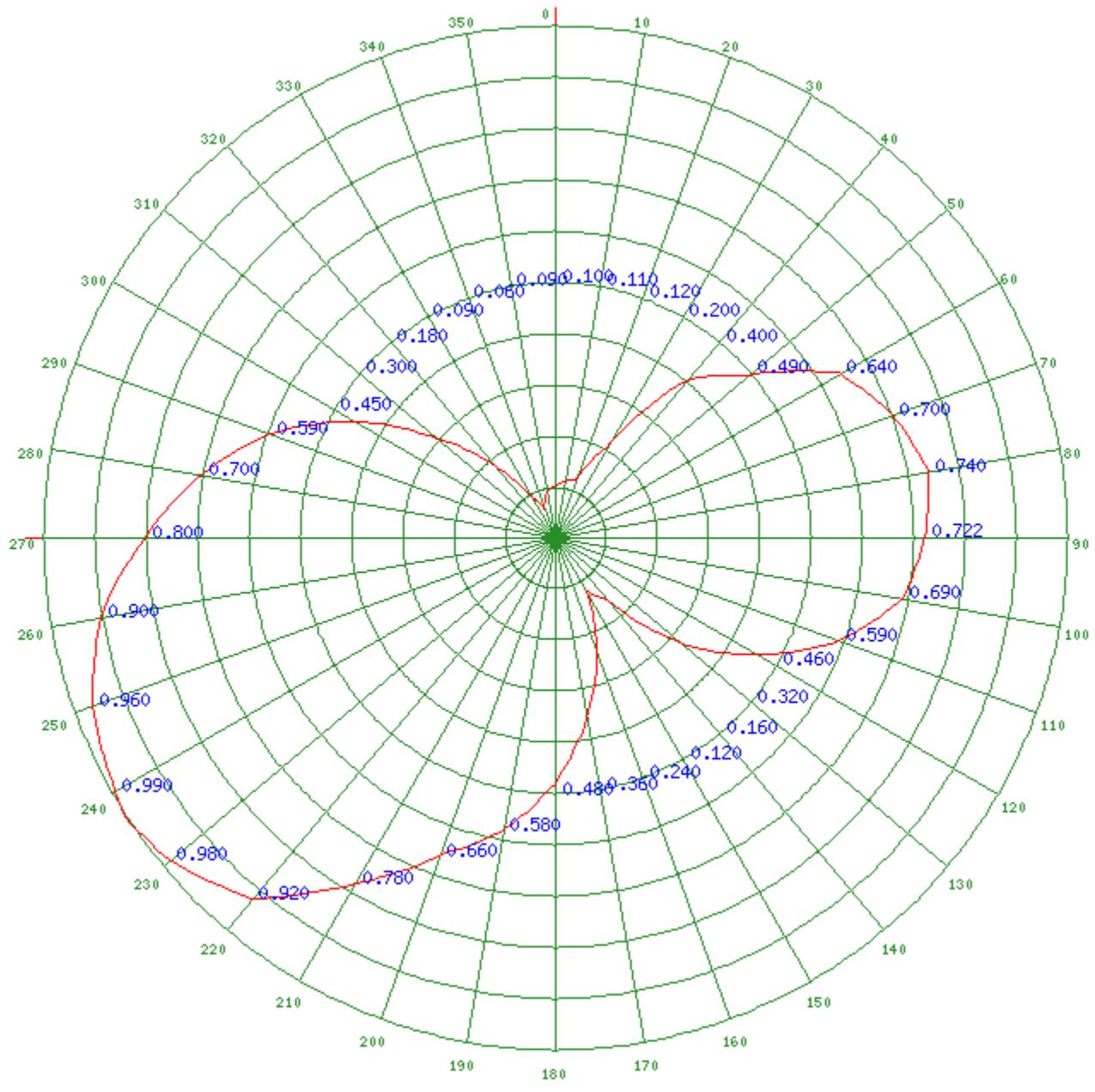
Exhibit 10

Description: SEE ENGINEERING EXHIBIT

Attachment 10

Any specified rotation has already been applied to the plotted pattern.
Field strength values shown on a rotated pattern may differ from the listed values
because intermediate azimuths are interpolated between entered azimuths.

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