Contour Distance Determination
KTVW License Partnership, G.P
KTVW-DT Phoenix, AZ
Ch 33 470 kW 510 m   (Aux)

The distances to the licensed and proposed KTVW-DT auxiliary noise-limited contours were determined using the procedure specified in §73.625(b)(2) of the Commission's rules. The antenna elevation radiation pattern was not used to determine effective radiated power (ERP) values for the licensed main facility contour, but it was used for the proposed auxiliary facility ERP determination.

The effective antenna height (EAH) above average terrain values were computed for 10 degree intervals of azimuth using the NGDC 3 arc-second terrain database and the pertinent antenna radiation center elevations above sea level. From these EAH values, the depression angle to the radio horizon was calculated using the formula specified in §73.625(b)(2). The pertinent antenna relative field value was obtained from the attached elevation radiation patterns. The data obtained are:

Condition	Licensed Main			Proposed Auxiliary		
	EAH (m)	A_h (°)	Relative Field	EAH (m)	A_h (°)	Relative Field
Maximum EAH (310°)	551	0.65	0.98	551	0.65	0.79
Minimum EAH (60°)	435	0.58	0.96	435	0.58	0.76

The relative field values for the licensed main antenna are above 90%, so the full ERP of 470 kW is used to determine contour distances along all 36 radial bearings. The relative field values for the proposed auxiliary antenna are all below 90%, so the ERP calculated with the antenna elevation pattern relative value must was used for all 36 radial bearings, per §73.625(b)(2).

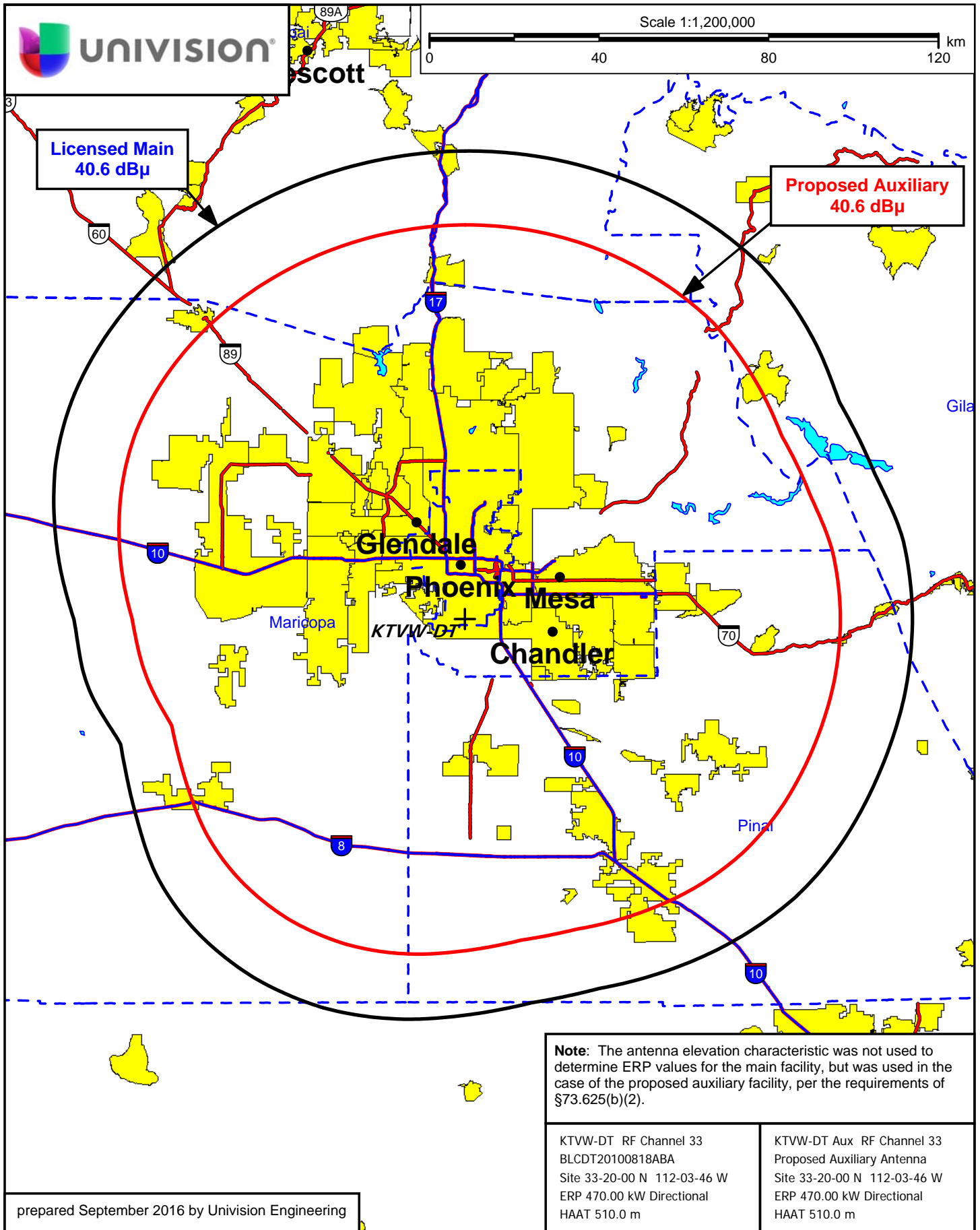# Figure 1: KTVW-DT Main & Proposed Auxiliary Coverage

Scale 1:1,200,000

0   40   80   120   km

Licensed Main 40.6 dBμ

Proposed Auxiliary 40.6 dBμ

Prescott

Glendale

Phoenix   Mesa

KTVW-DT

Chandler

Maricopa

Pinal

Gila

Note: The antenna elevation characteristic was not used to determine ERP values for the main facility, but was used in the case of the proposed auxiliary facility, per the requirements of §73.625(b)(2).

KTVW-DT RF Channel 33	KTVW-DT Aux RF Channel 33
BLCDT20100818ABA	Proposed Auxiliary Antenna
Site 33-20-00 N 112-03-46 W	Site 33-20-00 N 112-03-46 W
ERP 470.00 kW Directional	ERP 470.00 kW Directional
HAAT 510.0 m	HAAT 510.0 m

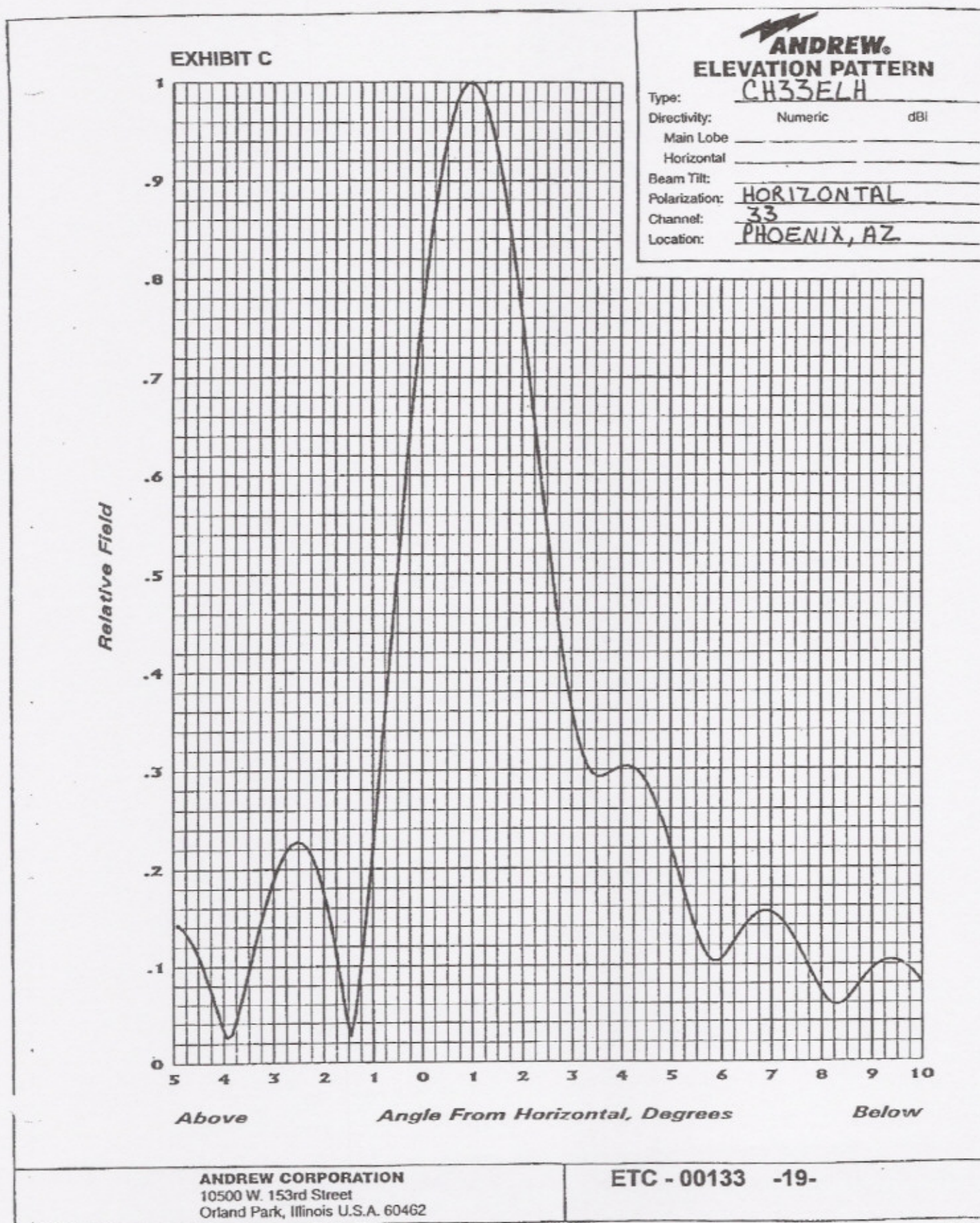prepared September 2016 by Univision Engineering

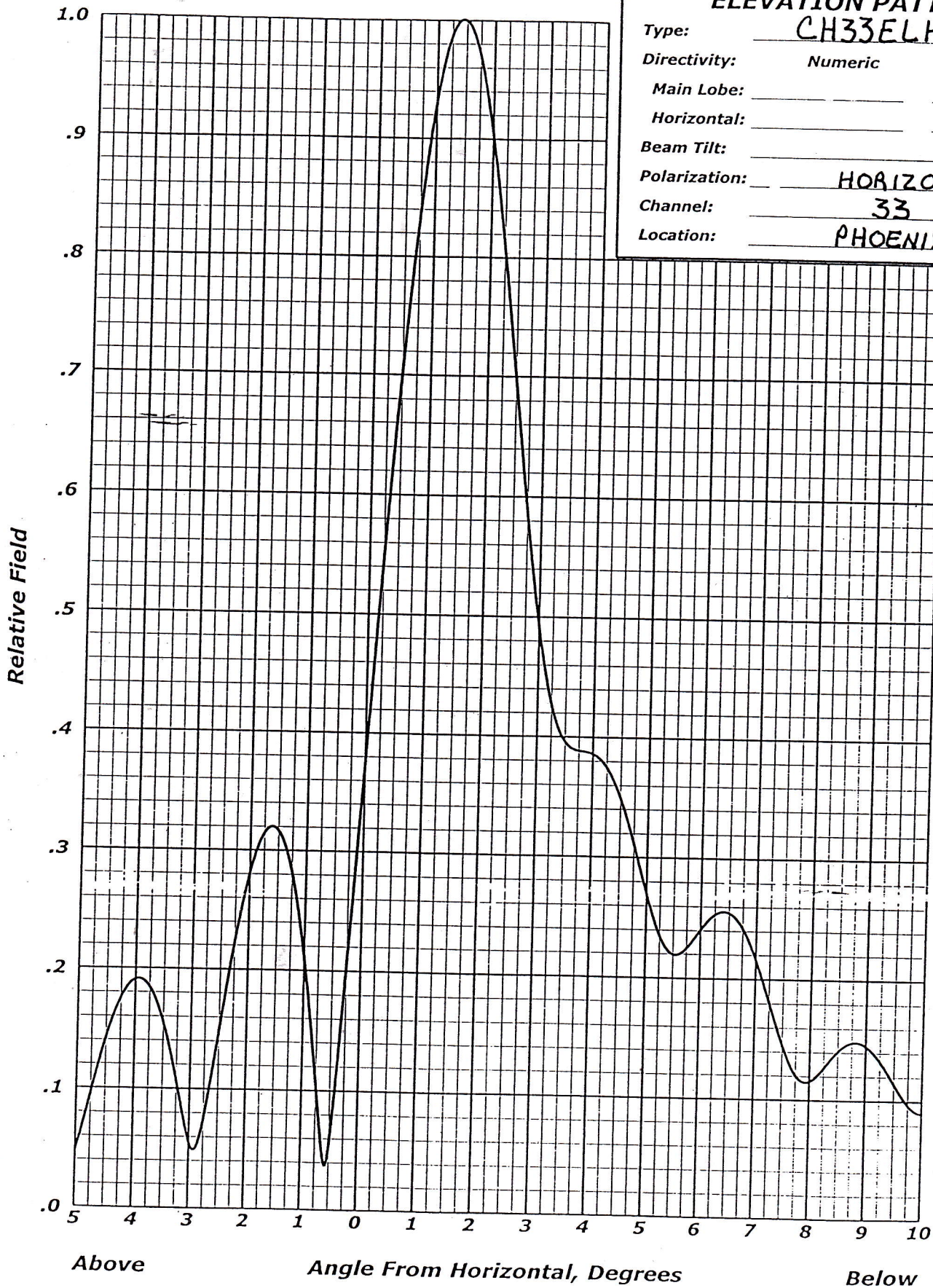**Figure 2: Main Antenna Elevation Pattern**

EXHIBIT C

ANDREW.
ELEVATION PATTERN
Type: CH33ELH
Directivity: Numeric   dBi
Main Lobe
Horizontal
Beam Tilt:
Polarization: HORIZONTAL
Channel: 33
Location: PHOENIX, AZ

Relative Field

Above   Angle From Horizontal, Degrees   Below

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

ETC - 00133   -19-

EXHIBIT C

ANDREW
ELEVATION PATTERN

Type: **CH33ELH**

Directivity: Numeric _____ dBd

Main Lobe: _____ _____

Horizontal: _____ _____

Beam Tilt: _____ _____

Polarization: **HORIZONTAL**

Channel: **33**

Location: **PHOENIX, AZ**

Relative Field

Above   Angle From Horizontal, Degrees   Below

ETC-13334 -7-