

Exhibit 13-C
Section 74.1204
Contour Protection to KGSX

The proposed K234CI modification will not cause prohibited interference to KGSX, Channel 236C1, Comfort, TX. The KGSX FCC F(50,50) protected contour at the K234CI application site is 75.8 dBu. Therefore the K234CI F(50,10) interfering contour with respect to KTFM is the 115.8 dBu contour. Using the FCC's FM propagation curves program (see attached), the 115.8 dBu contour was calculated to extend 180 meters from the antenna. As shown on the accompanying spreadsheet and chart, using the vertical elevation pattern data for the Nicom BKG-77, the ERP and contour distances have been calculated every 10 degrees from 0 degrees to 90 degrees. The contour distance decreases from a maximum distance of 180 meters at 0 degrees to 20 meters at 90 degrees. That data was calculated in the attached chart to plot the distance the interfering contour extends into free space. The contour does not reach the ground. The contour comes to within 57.3 meters (188 feet) of ground level at approximately 95 meters from the tower base.

Please refer to Exhibit 13-D for a detailed description of the area around the proposed K234CI modification. There are no buildings more than two stories high within approximately 500 meters of the tower. The nearest high rise building is 510 meters from the tower base.

It is believed that the proposed modification to K234CI will not cause prohibited interference to KGSX as no interference reaches the ground and there are no buildings more than two stories tall near the tower. Therefore it is believed the proposed K234CI

modification is in compliance with Section 74.1204 contour protection with respect to KGSX.

**EXHIBIT 13-C Section 74.1204
Contour Protection - KGSX**

Proposed operation of K234CI - San Antonio, TX
on Channel 233 with 250 watts at 125 m HAAT.
The proposed K234CI FCC F(50,10) 115.8 dBu
interfering contour does not reach the ground.

KGSX Comfort, TX
BLH-20071121AGJ
29° 38' 03" N ~ 98° 47' 57.8" W
ERP: 100 kW - HAAT: 201 m
Frequency: 95.1 MHz
Channel/Class: 236C1
RC-AMSL: 616 m
Horizontal Pattern: Omni

K234CI San Antonio, TX
BNPFT-20130829AHY
29° 26' 29" N ~ 98° 30' 22" W
ERP: 0.25 kW - HAAT: 124 m
Frequency: 94.7 MHz
Channel/Class: 233D
RC-AMSL: 344 m
Horizontal Pattern: Directional

Bandera

Kendall

Comal

Hays

KGSX

KGSX FCC F(50,50)
75.8 dBu Contour

Guadalupe

Medina

K234CI proposed FCC
F(50,10) 115.8 dBu contour

Bexar

Wilson

HORIZON
BROADCAST SOLUTIONS



Screen 3 - Results

Results of Calculation

Distance to Contour = 0.180 kilometers

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[Back to Initial Selections](#)

Input Data from Screens 1 and 2

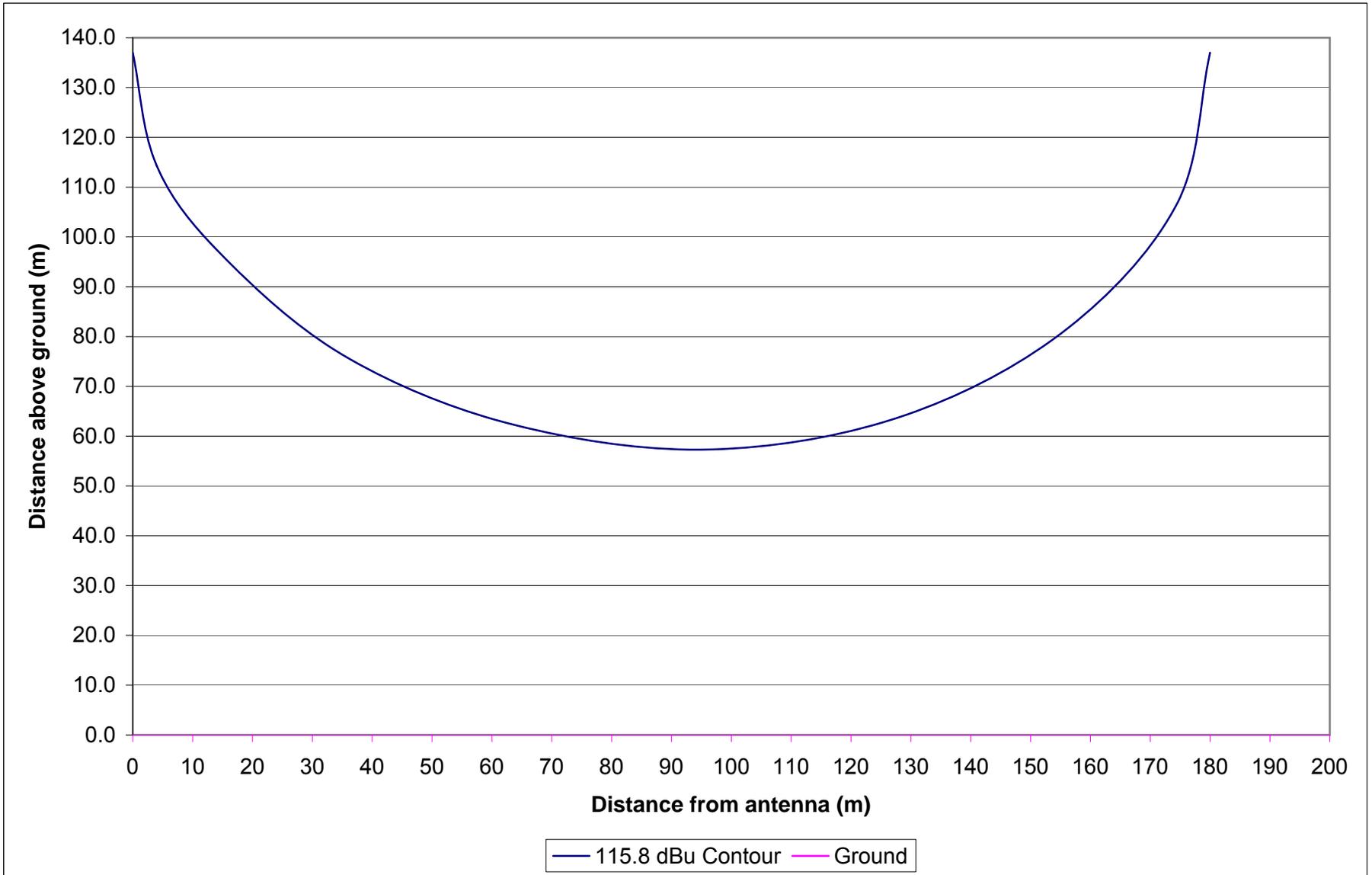
ERP = 0.250 kW
HAAT = 137.0 meters
Field Strength = 115.8 dBu

Distances are in **meters and kilometers**
Power is in **kW (kilowatts)**
Field Strength is in **dBu**
FM and NTSC TV Channels 2 through 6
F(50,10) for interfering contours selected
Find Distance, given a Field Strength

Θ (°)	Θ (radians)	R (m)	x'	y'	$y = 137 - y'$	Gnd
0	0	180	180	0	137.0	0
10	0.175	177	174.3	30.7	106.3	0
20	0.349	165	155.0	56.4	80.6	0
30	0.524	147	127.3	73.5	63.5	0
40	0.698	124	95.0	79.7	57.3	0
50	0.873	97	62.4	74.3	62.7	0
60	1.047	70	35.0	60.6	76.4	0
70	1.222	43	14.7	40.4	96.6	0
80	1.396	23	4.0	22.7	114.3	0
90	1.571	19	0.0	19	137	0

Angle of Elevation (Degrees)	Relative Field	ERP (dBk)	115.8 dBu Contour* (Meters)
0	1	-6.021	180
10	0.982	-6.18	177
20	0.918	-6.758	165
30	0.818	-7.773	147
40	0.691	-9.245	124
50	0.538	-11.427	97
60	0.391	-14.203	70
70	0.239	-20.458	43
80	0.129	-23.98	23
90	0.105	-26.99	19

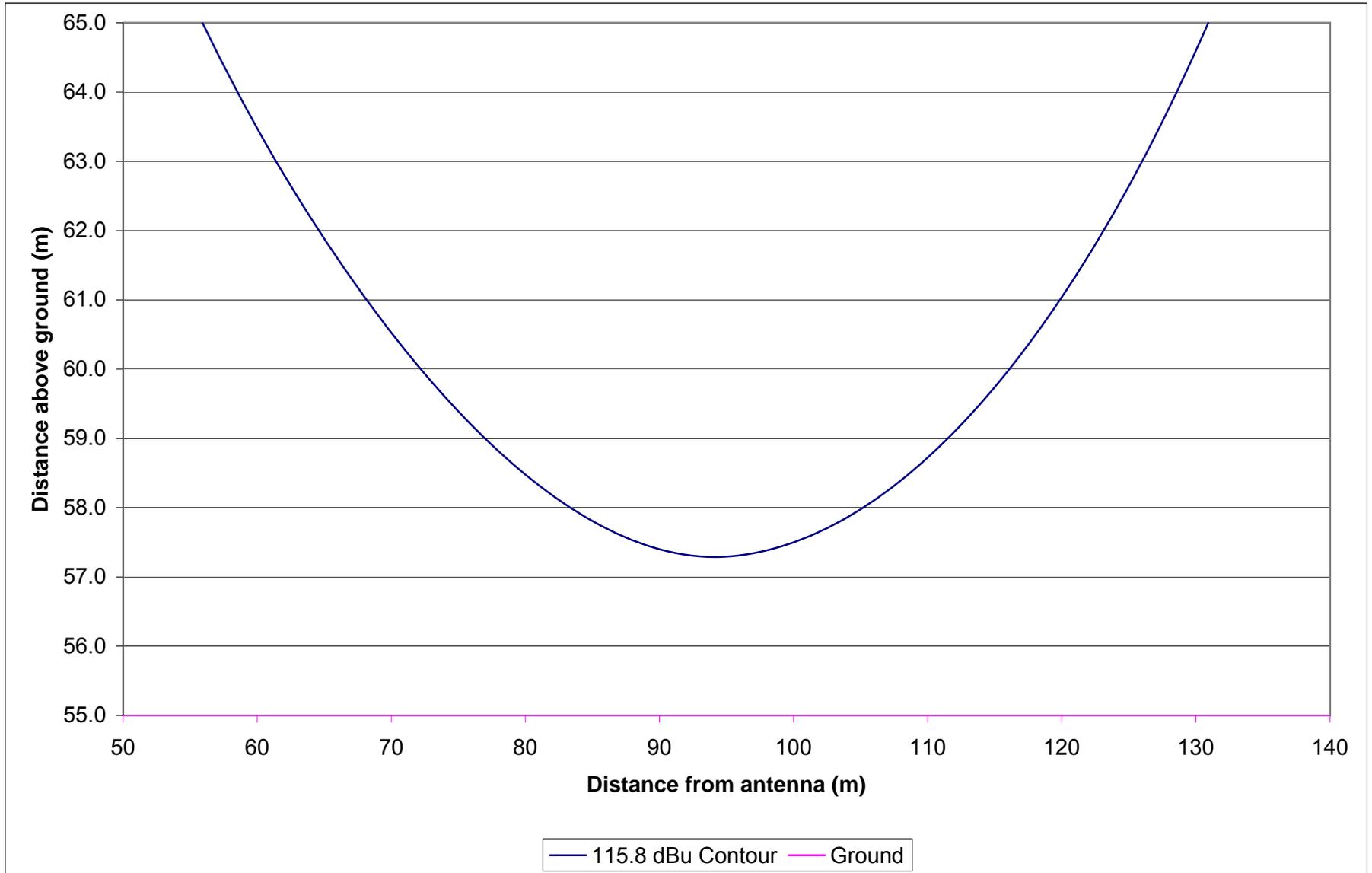
K234CI - San Antonio, TX
Section 74.1204 Contour Protection to KGSX CH236C1 Comfort, TX
(115.8 dBu F(50,10) interfering contour shown)



The K234CI interfering contour with respect to KGSX does not reach the ground.

K234CI - San Antonio, TX
Section 74.1204 Contour Protection to KGSX CH236C1 Comfort, TX
(interfering contour shown at closest point to the ground)

(115.8 dBu F(50,10) interfering contour shown)



The K234CI interfering contour with respect to KGSX does not reach the ground.