

# Channel Six TV Protection Study

WPVITV 06 74.100kW ERP 398.0M COR AMSL 332.0M HAAT Lat. 400239 Lon. 751426  
 Prop 209 9.500kW ERP 85.0M COR AMSL 52.0M HAAT Lat. 400434 Lon. 742237

Distance from TV to FM 73.7695km Azi 267.2degr Rev Azi 87.2 degr  
 Cutoff radius for channel 209 is 196 km

The FM horizontal polarization component is 0.001 kW,  
 and the area of just perceptible interference does not intersect a city of 50k,  
 so the effective ERP is (Pv/40+Ph) 0.2385kW

The TV6 signal strength at the FM transmit site is 59.547 dBu  
 For F centroids (centroids where the TV6 signal strength is less than 68 dBu and  
 which are also +/-70 degrees from line from the FM station to the TV station)  
 a 6 dB bonus is added to the allowable FM signal.

TV Contour	Undesired/Desired Ratio	Total	Directional Total
56	10.5	66.5	72.5
57	9.6	66.6	72.6
58	8.7	66.7	72.7
59	7.8	66.8	72.8
60	7.0	67.0	73.0
61	6.3	67.3	73.3

Ident.	Lat.	Lon.	Dist	Angle	TV6 dBu	Max FM	FM dBu	FM Ovr	Count	I/O	SubTot
NJ11286	400415	742022	3.3	100	58.21	66.68	78.76	12.08	1100	In	1100
NJ11261	400522	741836	5.9	76	57.03	66.52	68.23	1.71	113	In	1213
NJ11254	400454	742024	3.2	79	58.18	66.67	79.00	12.33	46	In	1259
NJ11253	400549	742013	4.1	56	57.96	66.64	72.54	5.89	281	In	1540
NJ11244	400628	742127	3.9	25	58.63	66.74	75.69	8.94	179	In	1719
NJ11241	400706	742032	5.5	32	58.00	66.65	69.43	2.78	1198	In	2917

Population in affected area 2917

2000 Group Block Centroids used