

Population Database: 2000 US Census (SF1)

V-Soft Communications Population Report

W40DE- (40) Unknown

Broadcast Type: Digital Service: G [Simple Emission Mask]

Lat: 18-16-49 N Lng: 066-06-35 W ERP: 0.009 kW AMSL: 540.0 m

TV Incoming Interference Study

Interference Considered Within: FCC Contour: 51 dBu

Signal Resolution: 1.0 km

LR Profile Spacing Increment: 1.0 km

Consider NTSC Taboo: Yes

KWX error points are considered as  
possible interference points.

# of radials computed for protected contour: 72

Protected contour calculated using 8 radial HAAT.

Using lptv/translators D/U rules.

Threshold for reception: 41.1955 dBu

Pop Centroid DB: 2010 US Census (PL)

Study Date: 7/16/2011

TV Database Date: 7/16/2011

Primary Terrain: V-Soft 3 Second Alaska Terrain

Secondary Terrain: NED 3 Second US Terrain

Population Database: 2000 US Census (SF1)

Percentages calculated using a baseline population of 667,316.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
W39DE-D.C (39)	93	211	0.032	0.98
WIRS-D (41)	37,392	101,007	15.136	24.55

Masking Summary:

Call Letters	Total Interference Population	%	Unique Interference Population	%
W39DE-D.C (39)	211	0.032	0	0.000
WIRS-D (41)	101,007	15.136	100,796	15.105

Stations considered which do not cause interference:

WJWN-TV-D (39)  
W39DJ-D.C (39)  
W40DA-D.C (40)

Call Letters	City	State	Dist	Azi
WJWN-TV-D (39)	San Sebastian	PR	93.5	261.3
W39DJ-D.C (39)	Naguabo	PR	46.0	89.5
W39DE-D.C (39)	Cayey	PR	19.9	194.1
W40DA-D.C (40)	Quebradillas	PR	88.1	283.2
WIRS-D (41)	Yauco	PR	50.9	256.1

Totals for W40DE- (40)

Calculation Area Population:	686,246	[	295.6 sq. km ]
Not Affected by Terrain Loss:	667,316	[	279.9 sq. km ]
Total NTSC Interference:	0	[	0.0 sq. km ]
DTV Only Interference:	101,007	[	24.5 sq. km ]
Total DTV Interference:	101,007	[	24.5 sq. km ]
Interfered Population:	101,007	[	24.5 sq. km ]

Interference Free:	566,309	[ 255.3 sq. km ]
Percent Interference:	15.14 %	
Terrain Blocked Population:	18,930	[ 15.7 sq. km ]
Contour Area Population:	685,982	

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Interference Free Breakdown:

White:	7,252	[ 1.3% ]
Black:	1,222	[ 0.2% ]
Hispanic:	556,223	[ 98.2% ]
Native American:	132	[ 0.0% ]
Asian:	747	[ 0.1% ]
Pacific Islander:	61	[ 0.0% ]
Mixed Race:	591	[ 0.1% ]
Other:	81	[ 0.0% ]
Total:	566,309	

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	Housing Units	Population	%
Puerto Rico			
Aguas Buenas Municipio			
Total	10,412	29,032	
W40DE- (40)	1,413	3,737	
W39DE-D.C (39)	93	211	5.65
WIRS-D (41)	93	211	5.65
IxFree	1,320	3,526	94.35
Bayamón Municipio			
Total	79,476	224,044	
W40DE- (40)	70,064	195,700	
WIRS-D (41)	1,545	7,847	4.01
IxFree	68,519	187,853	95.99
Cataño Municipio			
Total	10,366	30,071	
W40DE- (40)	10,315	29,901	
IxFree	10,315	29,901	100.00
Guaynabo Municipio			
Total	36,826	100,053	
W40DE- (40)	35,664	95,582	
IxFree	35,664	95,582	100.00
San Juan Municipio			
Total	182,101	434,374	
W40DE- (40)	129,565	312,187	
WIRS-D (41)	29,836	76,100	24.38
IxFree	99,729	236,087	75.62
Toa Alta Municipio			
Total	21,075	63,929	
W40DE- (40)	275	860	
IxFree	275	860	100.00
Toa Baja Municipio			
Total	33,473	94,085	
W40DE- (40)	2,817	7,882	
IxFree	2,817	7,882	100.00
Trujillo Alto Municipio			
Total	26,241	75,728	
W40DE- (40)	7,411	21,467	
WIRS-D (41)	5,918	16,849	78.49
IxFree	1,493	4,618	21.51