

# TVSTUDY ANALYSIS FOR WQHA – DTS, AGUADA, PR (CHANNEL 25)(CELL SIZE = 1.0 KM / TERRAIN = 0.14 KM)

tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: wqhadts9f, Model: Longley-Rice

Study build station data: LMS TV 2022-07-27

Proposal: WQHADTS9F D25 DD AMD AGUADA, PR  
File number: wqhadts9f  
Facility ID: 3255  
Station data: User record  
Record ID: 4791  
Country: U.S.  
Zone: II

Ref. lat.: 18 10 20.80 N (Reference distance = 128.0 km / Largest station in market = WORO-DT.)  
Ref. long.: 66 35 30.30 W  
# DTS sites: 2

Search options:  
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000188175	52.3 km
Yes	WQQZ-CD	D24	DC	LIC	PONCE, PR	BLANK0000058704	19.8
Yes	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000127578	19.8
Yes	WIPR-TV	D26	DT	CP	SAN JUAN, PR	BLANK0000034681	57.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied, DTS site # 1:

Channel: D25  
Latitude: 18 10 20.80 N (NAD83)  
Longitude: 66 35 30.30 W  
Height AMSL: 1354.0 m  
HAAT: 839.0 m  
Peak ERP: 20.7 kW  
Antenna: JAM-JA/SS-16/25-SHC (ID 1009689) 119.0 deg  
Elev Pattn: Generic  
Elec Tilt: 0.75

39.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.747 kW	816.2 m	68.8 km
45.0	0.763	772.8	68.3
90.0	5.81	464.1	73.5
135.0	18.0	960.1	98.2
180.0	18.2	1073.4	101.0
225.0	17.4	893.6	96.2
270.0	19.6	691.6	91.7
315.0	7.70	1037.6	92.2

Record parameters as studied, DTS site # 2:

Channel: D25  
Latitude: 18 16 40.20 N (NAD83)  
Longitude: 66 6 31.00 W  
Height AMSL: 545.7 m  
HAAT: 328.0 m  
Peak ERP: 12.1 kW  
Antenna: DIE-TFU-16DSB/VP-R P270 SP (ID 97752) 15.0 deg  
Elev Pattn: Generic  
Elec Tilt: 3.00

39.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	9.92 kW	481.8 m	77.7 km
45.0	5.68	432.2	72.0
90.0	1.14	430.3	61.9
135.0	0.793	394.4	58.0
180.0	9.93	139.6	56.4

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225.0	5.68	112.0	51.8
270.0	1.14	176.9	48.4
315.0	0.793	453.6	60.6

DTS proposal coverage is within reference facility and distance limit

Distance to Canadian border: 2946.3 km

Distance to Mexican border: 3233.9 km

Conditions at FCC monitoring station: Santa Isabel PR  
DTS site # 1 Bearing: 129.0 degrees Distance: 29.5 km  
DTS site # 2 Bearing: 222.9 degrees Distance: 41.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
DTS site # 1 Bearing: 311.7 degrees Distance: 4421.3 km  
DTS site # 2 Bearing: 311.4 degrees Distance: 4451.7 km

Study cell size: 1.00 km (Higher resolution cell size is requested.)  
Profile point spacing: 0.14 km (Higher resolution terrain profile point spacing is requested.)

Maximum new IX to full-service and Class A: 0.50%  
Maximum new IX to LPTV: 2.00%

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Interference to BLANK0000188175 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000188175			
Undesireds:	WQHA	D25	DT	BL	AGUADA, PR	DTVBL3255	114.2 km		
	WQHADTS9F	D25	DD	AMD	AGUADA, PR	wqhads9f	52.3		
	WVSN	D23	DT	LIC	HUMACAO, PR	BLANK0000077885	27.1		
	WQQZ-CD	D24	DC	LIC	PONCE, PR	BLANK0000058704	71.3		
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
20419.4	2,773,863	17361.3	2,555,117	16569.7	2,543,358	16565.8	2,543,024	0.02	0.01
Undesired				Total IX	Unique IX, before	Unique IX, after			
WQHA	D25	DT	BL	1.0	0	1.0	0		
WQHADTS9F	D25	DD	AMD	84.9	334	4.9	334		
WVSN	D23	DT	LIC	739.3	11,759	312.7	11,759		
WQQZ-CD	D24	DC	LIC	477.9	0	51.3	0		

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Interference to BLANK0000058704 LIC scenario 1

Desired:	Call WQQZ-CD	Chan D24	Svc DC	Status LIC	City, State PONCE, PR	File Number BLANK0000058704	Distance				
Undesireds:	WQHA	D25	DT	BL	AGUADA, PR	DTVBL3255	53.2 km				
	WQHADTS9F	D25	DD	AMD	AGUADA, PR	wqhads9f	19.8				
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000188175	71.3				
Service area		Terrain-limited			IX-free, before		IX-free, after	Percent New IX			
4993.6	461,261	4872.3	424,498		4870.4	424,469	4856.6	424,376	0.28	0.02	
Undesired				Total IX		Unique IX, before		Unique IX, after			
WQHA D25 DT BL		0.0		0		0.0		0			
WQHADTS9F D25 DD AMD		15.8		122		13.8		93			
WUJA D24 DT CP		2.0		29		2.0		29		0.0	0

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Interference to BLANK0000127578 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000127578	
Undesireds:	WQHA	D25	DT	BL	AGUADA, PR	DTVBL3255	53.2 km
	WQHADTS9F	D25	DD	AMD	AGUADA, PR	wqhads9f	19.8

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Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
9176.4	908,061	8822.6	796,871	8818.7	796,073	8816.7	796,414	0.02	-0.04
Undesired		Total IX		Unique IX, before		Unique IX, after			
WQHA D25 DT BL		3.9	798	3.9	798				
WQHADTS9F D25 DD AMD		5.9	457			5.9	457		

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Interference to BLANK0000034681 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WIPR-TV	D26	DT	CP	SAN JUAN, PR	BLANK0000034681	
Undesireds:	WQHA	D25	DT	BL	AGUADA, PR	DTVBL3255	122.3 km
	WQHADTS9F	D25	DD	AMD	AGUADA, PR	wqhadt9f	57.5
	WAPA-TV	D27	DT	LIC	SAN JUAN, PR	BLANK0000191707	0.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
49529.4	3,747,978	48521.7	3,426,159	48475.4	3,417,553	48351.4	3,401,145	0.26	0.48
Undesired		Total IX		Unique IX, before		Unique IX, after			
WQHA D25 DT BL		35.5	6,013	35.5	6,013				
WQHADTS9F D25 DD AMD		159.5	22,421			159.5	22,421		
WAPA-TV D27 DT LIC		10.8	2,593	10.8	2,593	10.8	2,593		

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Interference to proposal scenario 1  
2.87% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WQHADTS9F	D25	DD	AMD	AGUADA, PR	wqhadt9f	
Undesireds:	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000188175	52.3 km
	WQQZ-CD	D24	DC	LIC	PONCE, PR	BLANK0000058704	19.8
	WIPR-TV	D26	DT	CP	SAN JUAN, PR	BLANK0000034681	57.5

Service area		Terrain-limited		IX-free		Percent IX	
29703.6	3,714,661	28139.4	3,428,488	26523.7	3,329,965	5.74	2.87
Undesired		Total IX		Unique IX		Prcnt Unique IX	
WUJA D24 DT CP		6.9	2,891	3.0	1,098	0.01	0.03
WQQZ-CD D24 DC LIC		5.9	800	5.9	800	0.02	0.02
WIPR-TV D26 DT CP		1606.8	96,625	1602.9	94,832	5.70	2.77

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Interference to proposal scenario 2  
3.91% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WQHADTS9F	D25	DD	AMD	AGUADA, PR	wqhadt9f	
Undesireds:	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000188175	52.3 km
	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000127578	19.8
	WIPR-TV	D26	DT	CP	SAN JUAN, PR	BLANK0000034681	57.5

Service area		Terrain-limited		IX-free		Percent IX	
29703.6	3,714,661	28139.4	3,428,488	26101.5	3,294,497	7.24	3.91
Undesired		Total IX		Unique IX		Prcnt Unique IX	
WUJA D24 DT CP		6.9	2,891	3.0	1,098	0.01	0.03
WQQZ-CD D24 DC CP		434.0	36,852	428.1	36,268	1.52	1.06
WIPR-TV D26 DT CP		1606.8	96,625	1597.0	94,248	5.68	2.75

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