

INTERFERENCE ANALYSIS FOR LICENSED W20DD-D, MARION, ETC., NC, CHANNEL 20, WITH RESPECT TO WUNC-TV

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: W20DD_L, Model: Longley-Rice

Study build station data: LMS TV 2018-04-01

Proposal: W20DD_L D20 LD LIC MARION, ETC., NC
File number: W20DD_L
Facility ID: 66386
Station data: User record
Record ID: 2528
Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WCEE-LD	N16-	TX	LIC	CHARLOTTE, NC	BLTT20041025ACE	91.4 km
No	W19HK-D	D19	LD	LIC	BLACK MOUNTAIN, NC	BLDTT20090615AAO	79.1
No	W19DD-D	D19	LD	LIC	BREVARD, NC	BLDTT20090615AAW	120.2
Yes	WSOC-TV	D19	DT	CP	CHARLOTTE, NC	BLANK0000034695	87.8
No	WGSR-LD	D19	LD	APP	REIDSVILLE, NC	BLANK0000029478	178.6
Yes	W06OD	D19	LD	CP	SPRUCE PINE, NC	BDCCDTT20141125AZF	56.4
No	W19CR-D	D19	LD	LIC	TRYON, NC	BLANK0000027376	81.5
No	WKPZ-CD	D19	DC	LIC	KINGSPORT, TN	BLANK0000001584	131.7
No	WKPZ-CD	D19	DC	LIC	KINGSPORT, TN	BLANK0000001597	131.7
No	WANN-CD	D20	DC	CP	ATLANTA, GA	BLANK0000028242	332.7
No	WCZC-LD	D20	LD	LIC	AUGUSTA, GA	BLDTL20150112ACR	273.2
No	WDNN-CD	D20	DC	CP	DALTON, GA	BLANK0000028630	335.1
No	W20DL-D	D20	LD	CP	MACON, GA	BNPDTL20100205ACG	378.1
No	W20EC-D	D20	LD	CP	VIDALIA, GA	BDCCDTL20121001AGL	375.0
Yes	WUNF-TV	D20	DD	CP	ASHEVILLE, NC	BLANK0000029742	107.3
Yes	W12AU	D20	LD	CP	BURNSVILLE, NC	BDCCDTT20141125AZE	74.0
Yes	WUNC-TV	D20	DT	CP	CHAPEL HILL, NC	BLANK0000034414	213.4
No	WDZA-LD	D20	LD	LIC	WILMINGTON, NC	BLDTL20140224AAZ	337.5
No	WDZA-LD	D20	LD	CP	WILMINGTON, NC	BNPDTL20140806ACN	337.4
No	WLWT	D20	DT	CP	CINCINNATI, OH	BLANK0000034539	462.6
No	WBSE-LP	D20	LD	LIC	CHARLESTON, SC	BLANK0000001416	356.9
No	WBSE-LP	D20	LD	CP	CHARLESTON, SC	BLANK0000004167	356.9
No	WCBD-TV	D20	DT	CP	CHARLESTON, SC	BLANK0000034805	350.6
No	W20DH-D	D20	LD	CP	FLORENCE, SC	BNPDTL20100409ABW	262.8
No	WZTV	D20	DT	CP	NASHVILLE, TN	BLANK0000028847	477.8
No	WHSV-TV	D20	DT	CP	HARRISONBURG, VA	BLANK0000029912	336.4
No	WGNT	D20	DT	CP	PORTSMOUTH, VA	BLANK0000034473	466.4
No	W20DY-D	D20	LD	CP	ROANOKE, WV	BNPDTL20100514AAR	372.0
Yes	WUNG-TV	D21	DT	CP	CONCORD, NC	BLANK0000034415	91.5
No	WDRF-LD	D21	LD	CP	Columbia, SC	BLANK0000004328	198.0
No	WWCW	D21	DT	CP	LYNCHBURG, VA	BLANK0000027725	246.3

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D20

Mask: Stringent

Latitude: 35 42 33.00 N (NAD83)

Longitude: 81 31 31.90 W

Height AMSL: 703.4 m

HAAT: 0.0 m

Peak ERP: 10.5 kW

Antenna: AND-ALP8L4-HSER (ID 17025) 15.0 deg

Elev Pattn: Generic

Elec Tilt: 1.00

49.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	10.5 kW	338.5 m	57.6 km
45.0	10.5	356.2	58.4
90.0	7.60	362.3	57.0
135.0	1.92	369.9	49.9
180.0	0.128	342.4	32.9
225.0	0.047	247.1	24.3

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270.0 3.49 294.2 49.3
315.0 9.40 356.8 57.9

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 333 m

Distance to Canadian border: 667.6 km

Distance to Mexican border: 1821.0 km

Conditions at FCC monitoring station: Powder Springs GA
Bearing: 235.8 degrees Distance: 356.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 290.4 degrees Distance: 2128.3 km

No land mobile station failures found

Study cell size: 1.00 km
Profile point spacing: 1.00 km

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

Interference to BLANK0000034414 CP scenario 1

****IX: 1.82% interference caused**

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WUNC-TV	D20	DT	CP	CHAPEL HILL, NC	BLANK0000034414	
Undesireds:	W20DD-L	D20	LD	LIC	MARION, ETC., NC	W20DD-L	213.4 km
	WSOC-TV	D19	DT	CP	CHARLOTTE, NC	BLANK0000034695	156.3
	WYDO	D19	DT	CP	GREENVILLE, NC	BLANK0000034494	186.1
	WLHG-CD	D19	DC	CP	LYNCHBURG, VA	BLANK0000034402	165.9
	WUNF-TV	D20	DD	CP	ASHEVILLE, NC	BLANK0000029742	314.2
	WCBD-TV	D20	DT	CP	CHARLESTON, SC	BLANK0000034805	328.8
	WHSV-TV	D20	DT	CP	HARRISONBURG, VA	BLANK0000029912	255.9
	WGNT	D20	DT	CP	PORTSMOUTH, VA	BLANK0000034473	260.5
	WUNG-TV	D21	DT	CP	CONCORD, NC	BLANK0000034415	142.1
	WUNJ-TV	D21	DT	CP	WILMINGTON, NC	BLANK0000034442	191.8
	WWCW	D21	DT	CP	LYNCHBURG, VA	BLANK0000027725	166.9

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	38688.1 4,183,383	38282.8 4,160,108	35849.6 3,991,063	35593.5 3,918,244	0.71 1.82

Undesired	Total IX	Unique IX, before	Unique IX, after
W20DD-L D20 LD LIC	837.1 152,395	256.1 72,819	
WSOC-TV D19 DT CP	630.5 34,001	28.9 613	
WYDO D19 DT CP	25.8 4,099	18.9 3,358	
WUNF-TV D20 DD CP	1269.0 122,446	415.3 74,038	
WCBD-TV D20 DT CP	468.1 22,214	172.9 6,334	
WHSV-TV D20 DT CP	86.4 1,932	35.2 395	
WGNT D20 DT CP	599.0 22,769	539.8 20,507	
WUNG-TV D21 DT CP	951.4 55,442	143.2 6,951	
WWCW D21 DT CP	19.1 522	15.0 306	
