

tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: W34EP-D Relocation 15K 1213 TUM C3, Model: Longley-Rice  
Start: 2023.11.09 13:43:02

Study created: 2023.11.09 13:40:36

Study build station data: LMS TV 2023-11-08 #170

Proposal: W34EP-D D21 LD APP SAPPHIRE VALLEY,ETC., NC  
File number: W34EP-D Relocation 15K 1213 TUM C3  
Facility ID: 56547  
Station data: User record  
Record ID: 222  
Country: U.S.

Build options:  
Protect pre-transition records not on baseline channel  
Protect baseline records from LPTV

Search options:  
Non-U.S. records included  
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	W20EQ-D	D20	LD	LIC	ATHENS, GA	BLANK0000212284	201.8 km
No	WANN-CD	D20	DC	LIC	ATLANTA, GA	BLANK0000092680	227.2
No	WYMT-TV	D20	DT	CP	HAZARD, KY	BLANK0000185947	226.4
No	W20EK-D	D20	LD	LIC	ANDREWS, ETC, NC	BLANK0000120275	113.2
No	WUNF-TV	D20	DD	LIC	ASHEVILLE, NC	BLANK0000093577	0.0
No	WDMC-LD	D20	LD	LIC	CHARLOTTE, NC	BLANK0000164588	169.2
No	WTTO	D21	DT	LIC	HOMEWOOD, AL	BLANK0000192390	435.8
Yes	WABE-TV	D21	DT	LIC	ATLANTA, GA	BLANK0000143418	230.7
No	DWANK-LP	D21+	LD	APP	COLUMBUS, GA	BLANK0000071786	383.3
No	WTMH-LD	D21	LD	LIC	MACON, GA	BLANK0000205957	289.9
No	WKYT-TV	D21	DT	LIC	LEXINGTON, KY	BLANK0000074953	354.1
Yes	W21DV-D	D21	LD	LIC	BRYSON CITY, NC	BLANK0000080638	80.4
Yes	WUNG-TV	D21	DT	LIC	CONCORD, NC	BLANK0000113063	176.6
No	WWIW-LD	D21	LD	LIC	RALEIGH, NC	BLANK0000178152	355.8
No	WUNJ-TV	D21	DT	LIC	WILMINGTON, NC	BLANK0000126699	407.0
Yes	WEBA-TV	D21	DT	LIC	ALLENDALE, SC	BLANK0000145391	249.7
No	W14CX-D	D21	LD	CP	KNOXVILLE, TN	BLANK0000195611	153.5
Yes	WKNX-TV	D21	DT	CP	KNOXVILLE, TN	BLANK0000224661	152.6
No	WUXP-TV	D21	DT	LIC	NASHVILLE, TN	BLANK0000159943	400.0
No	WWCW	D21	DT	LIC	LYNCHBURG, VA	BLANK0000199504	350.3
No	WHWV-LD	D21z	LD	CP	Huntington, WV	BLANK0000222217	356.0
No	WHSB-TV	D22	DT	LIC	MONROE, GA	BLANK0000081582	233.4
No	W41BQ	D22-	LD	CP	ASHEVILLE, NC	BLANK0000199272	49.7
No	W22FB-D	D22	LD	LIC	MARION, NC	BLANK0000116530	70.2
Yes	W32EO-D	D22	LD	CP	TRYON, ETC., NC	BLANK0000195198	28.1
No	WACH	D22	DT	LIC	COLUMBIA, SC	BLANK0000093772	204.3
No	WVEB-LD	D22	LD	LIC	FLORENCE, SC	BLANK0000083837	151.9
No	WSPA-TV	D22	LD	LIC	SPARTANBURG, SC	BLANK0000066995	97.8
No	WCTE	D22	DT	LIC	COOKEVILLE, TN	BLANK20110413ACS	273.5
No	WCTD-LD	D22	LD	LIC	DUCKTOWN, TN	BLANK0000185309	180.0
No	WCTD-LD	N22-	TX	LIC	DUCKTOWN, TN	BLTTL20070622ADD	174.3
No	WKPT-CD	D22	DC	LIC	KINGSPORT, TN	BLDTA20120420ACJ	145.1
No	DDWJZC-LP	N22+	TX	APP	SEVIERVILLE, TN	BLTTL19901017JE	116.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D21  
Mask: Full Service  
Latitude: 35 13 20.00 N (NAD83)  
Longitude: 82 32 58.00 W  
Height AMSL: 1213.0 m

HAAT: 0.0 m  
Peak ERP: 15.0 kW  
Antenna: DIE-TUM-LP-C3-1/3M-1 0.0 deg  
Elev Pattn: Generic

49.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	525.6 m	67.3 km
45.0	3.74	554.1	59.5
90.0	0.156	469.0	37.7
135.0	3.83	648.5	62.0
180.0	13.9	606.7	69.4
225.0	11.5	363.6	59.2
270.0	14.3	455.0	64.9
315.0	11.4	448.1	63.2

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m Computed HAAT: 509 m

Distance to Canadian border: 717.5 km

Distance to Mexican border: 1713.7 km

Conditions at FCC monitoring station: Powder Springs GA  
Bearing: 233.4 degrees Distance: 249.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 292.1 degrees Distance: 2061.5 km

No land mobile station failures found

Study cell size: 1.00 km  
Profile point spacing: 0.20 km

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

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Interference to BLANK0000143418 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WABE-TV	D21	DT	LIC	ATLANTA, GA	BLANK0000143418	
Undesireds:	W34EP-D	D21	LD	APP	SAPPHIRE VALLEY,ETC., NC	W34EP-D Relocation 15K	230.7 km
	WANN-CD	D20	DC	LIC	ATLANTA, GA	BLANK0000092680	5.4
	WDNN-CD	D20	DC	LIC	DALTON, GA	BLANK0000098043	125.1
	WDHN	D21	DT	LIC	DOTHAN, AL	BLCDT20090303ACR	294.5
	WTTO	D21	DT	LIC	HOMEWOOD, AL	BLANK0000192390	230.8
	WEBA-TV	D21	DT	LIC	ALLENDALE, SC	BLANK0000145391	279.7
	WKNX-TV	D21	DT	CP	KNOXVILLE, TN	BLANK0000224661	252.9
	WUXP-TV	D21	DT	LIC	NASHVILLE, TN	BLANK0000159943	357.2
	WHSG-TV	D22	DT	LIC	MONROE, GA	BLANK0000081582	2.8
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	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
18936.3	5,310,713	18596.9	5,288,527	17702.5	5,148,158	17680.8 5,145,679	0.12 0.05

Undesired	Total IX	Unique IX, before	Unique IX, after
W34EP-D D21 LD APP	35.6 3,829	21.7 2,479	
WANN-CD D20 DC LIC	232.3 48,872	118.6 33,231	
WDNN-CD D20 DC LIC	11.1 441	2.0 92	
WDHN D21 DT LIC	35.8 3,303	14.9 997	
WTTO D21 DT LIC	288.2 35,787	189.7 26,423	
WEBA-TV D21 DT LIC	48.6 1,861	29.7 1,188	
WKNX-TV D21 DT CP	53.8 4,757	11.0 1,374	
WUXP-TV D21 DT LIC	21.8 1,823	4.0 38	
WHSG-TV D22 DT LIC	455.8 72,544	312.1 52,110	
		311.1 51,925	

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Interference to BLANK0000080638 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W21DV-D	D21	LD	LIC	BRYSON CITY, NC	BLANK0000080638	
Undesireds:	W34EP-D	D21	LD	APP	SAPPHIRE VALLEY,ETC., NC	W34EP-D Relocation 15K	80.4 km
	W20EK-D	D20	LD	LIC	ANDREWS, ETC, NC	BLANK0000120275	37.2
	WABE-TV	D21	DT	LIC	ATLANTA, GA	BLANK0000143418	199.1
	WKYT-TV	D21	DT	LIC	LEXINGTON, KY	BLANK0000074953	308.3
	WUNG-TV	D21	DT	LIC	CONCORD, NC	BLANK0000113063	254.2
	W14CX-D	D21	LD	CP	KNOXVILLE, TN	BLANK0000195611	84.0
	WKNX-TV	D21	DT	CP	KNOXVILLE, TN	BLANK0000224661	84.1
	WUXP-TV	D21	DT	LIC	NASHVILLE, TN	BLANK0000159943	320.0
	WHWV-LD	D21z	LD	CP	Huntington, WV	BLANK0000222217	347.2
	WCTD-LD	D22	LD	LIC	DUCKTOWN, TN	BLANK0000185309	122.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
13658.4 455,163	9752.3 203,326	9708.6 201,606	9700.6 201,606	0.08 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
W34EP-D D21 LD APP	12.0 44	8.0 0	
W20EK-D D20 LD LIC	9.0 198	6.0 66	6.0 66
WABE-TV D21 DT LIC	4.0 4	3.0 0	3.0 0
WKYT-TV D21 DT LIC	1.0 0	0.0 0	0.0 0
WUNG-TV D21 DT LIC	2.0 40	0.0 0	0.0 0
W14CX-D D21 LD CP	4.0 0	0.0 0	0.0 0
WKNX-TV D21 DT CP	34.8 1,654	24.9 1,478	22.9 1,474
WUXP-TV D21 DT LIC	1.0 0	0.0 0	0.0 0

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Interference to BLANK0000113063 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WUNG-TV	D21	DT	LIC	CONCORD, NC	BLANK0000113063	
Undesireds:	W34EP-D	D21	LD	APP	SAPPHIRE VALLEY,ETC., NC	W34EP-D Relocation 15K	176.6 km
	WUNF-TV	D20	DD	LIC	ASHEVILLE, NC	BLANK0000093577	176.6
	WUNC-TV	D20	DT	LIC	CHAPEL HILL, NC	BLANK0000216258	142.1
	WUNJ-TV	D21	DT	LIC	WILMINGTON, NC	BLANK0000126699	246.0
	WEBA-TV	D21	DT	LIC	ALLENDALE, SC	BLANK0000145391	251.9
	WKNX-TV	D21	DT	CP	KNOXVILLE, TN	BLANK0000224661	308.5
	WWCW	D21	DT	LIC	LYNCHBURG, VA	BLANK0000199504	235.0
	WUVC-DT	D22	DT	LIC	FAYETTEVILLE, NC	BLANK0000125505	148.8
	WACH	D22	DT	LIC	COLUMBIA, SC	BLANK0000093772	138.8

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
30338.0 3,610,020	29866.4 3,590,858	28289.1 3,495,910	28111.5 3,479,451	0.63 0.47

Undesired	Total IX	Unique IX, before	Unique IX, after
W34EP-D D21 LD APP	292.3 28,344	177.7 16,459	
WUNF-TV D20 DD LIC	118.6 12,307	111.7 11,750	9.0 958
WUNC-TV D20 DT LIC	471.4 22,388	66.2 5,964	66.2 5,964
WUNJ-TV D21 DT LIC	962.1 35,460	564.9 22,668	563.9 22,668
WEBA-TV D21 DT LIC	5.0 0	3.0 0	3.0 0
WKNX-TV D21 DT CP	3.0 37	0.0 0	0.0 0
WWCW D21 DT LIC	506.4 46,171	157.8 31,870	154.8 31,351
WUVC-DT D22 DT LIC	461.2 14,571	67.6 2,001	67.6 2,001
WACH D22 DT LIC	70.4 857	47.2 609	47.2 609

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Interference to BLANK0000145391 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WEBA-TV	D21	DT	LIC	ALLENDALE, SC	BLANK0000145391	
Undesireds:	W34EP-D	D21	LD	APP	SAPPHIRE VALLEY,ETC., NC	W34EP-D Relocation 15K	249.7 km
	WABE-TV	D21	DT	LIC	ATLANTA, GA	BLANK0000143418	279.7
	WUNG-TV	D21	DT	LIC	CONCORD, NC	BLANK0000113063	251.9
	WUNJ-TV	D21	DT	LIC	WILMINGTON, NC	BLANK0000126699	318.8
	WJCL	D22	DT	LIC	SAVANNAH, GA	BLANK0000029019	125.7

WACH	D22	DT	LIC	COLUMBIA, SC	BLANK0000093772	118.7		
Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
14824.0	640,701	14791.3	639,132	14716.8 633,929	14712.8 633,370	0.03 0.09		
Undesired			Total IX	Unique IX, before	Unique IX, after			
W34EP-D D21 LD APP		13.9	2,262		4.0 559			
WABE-TV D21 DT LIC		13.9	3,108	5.9 2,465	5.9 2,465			
WUNG-TV D21 DT LIC		23.8	1,884	11.9 1,208	9.9 148			
WUNJ-TV D21 DT LIC		1.0	0	0.0 0	0.0 0			
WJCL D22 DT LIC		21.0	191	21.0 191	21.0 191			
WACH D22 DT LIC		26.7	696	23.7 663	23.7 663			

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Interference to BLANK0000224661 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WKNX-TV	D21	DT	CP	KNOXVILLE, TN	BLANK0000224661	
Undesireds:	W34EP-D	D21	LD	APP	SAPPHIRE VALLEY,ETC., NC	W34EP-D Relocation 15K	152.6 km
	WDNN-CD	D20	DC	LIC	DALTON, GA	BLANK0000098043	172.6
	WYMT-TV	D20	DT	CP	HAZARD, KY	BLANK0000185947	147.7
	WUNF-TV	D20	DD	LIC	ASHEVILLE, NC	BLANK0000093577	152.6
	WTTO	D21	DT	LIC	HOMEWOOD, AL	BLANK0000192390	384.3
	WABE-TV	D21	DT	LIC	ATLANTA, GA	BLANK0000143418	252.9
	WKYT-TV	D21	DT	LIC	LEXINGTON, KY	BLANK0000074953	229.4
	WUNG-TV	D21	DT	LIC	CONCORD, NC	BLANK0000113063	308.5
	WEBA-TV	D21	DT	LIC	ALLENDALE, SC	BLANK0000145391	390.1
	WUXP-TV	D21	DT	LIC	NASHVILLE, TN	BLANK0000159943	258.4
	WCTE	D22	DT	LIC	COOKEVILLE, TN	BLANK0000159943	128.0
	WKPT-CD	D22	DC	LIC	KINGSPORT, TN	BLANK0000159943	133.6

Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
36731.0	1,687,325	31614.3	1,518,860	30627.7 1,484,775	30621.7 1,484,771	0.02 0.00		
Undesired			Total IX	Unique IX, before	Unique IX, after			
W34EP-D D21 LD APP		16.0	50		6.0 4			
WDNN-CD D20 DC LIC		7.0	249	1.0 73	1.0 73			
WYMT-TV D20 DT CP		11.0	357	6.0 0	6.0 0			
WUNF-TV D20 DD LIC		9.9	46	5.0 46	3.0 0			
WTTO D21 DT LIC		30.8	690	15.9 398	15.9 398			
WABE-TV D21 DT LIC		17.9	1	12.0 1	12.0 1			
WKYT-TV D21 DT LIC		588.9	22,839	215.0 5,694	214.0 5,694			
WUNG-TV D21 DT LIC		17.9	0	15.9 0	11.9 0			
WEBA-TV D21 DT LIC		2.0	0	2.0 0	2.0 0			
WUXP-TV D21 DT LIC		601.1	22,841	184.8 4,866	184.8 4,866			
WCTE D22 DT LIC		302.9	15,564	44.4 1,372	44.4 1,372			
WKPT-CD D22 DC LIC		27.2	1,499	27.2 1,499	27.2 1,499			

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Interference to BLANK0000195198 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	W32EO-D	D22	LD	CP	TRYON, ETC., NC	BLANK0000195198	
Undesireds:	W34EP-D	D21	LD	APP	SAPPHIRE VALLEY,ETC., NC	W34EP-D Relocation 15K	28.1 km
	WHSG-TV	D22	DT	LIC	MONROE, GA	BLANK0000081582	257.2
	W22FB-D	D22	LD	LIC	MARION, NC	BLANK0000116530	50.0
	WACH	D22	DT	LIC	COLUMBIA, SC	BLANK0000093772	186.1
	WVEB-LD	D22	LD	LIC	FLORENCE, SC	BLANK0000083837	124.4
	WSPA-TV	D22	LD	LIC	SPARTANBURG, SC	BLANK0000066995	106.7
	WCTD-LD	D22	LD	LIC	DUCKTOWN, TN	BLANK0000185309	207.7
	WBTB	D23	DT	LIC	CHARLOTTE, NC	BLANK0000147971	96.5

Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
3970.8	665,428	3568.2	590,021	3393.6 569,481	3392.6 569,435	0.03 0.01		
Undesired			Total IX	Unique IX, before	Unique IX, after			
W34EP-D D21 LD APP		3.0	1,840		1.0 46			
WHSG-TV D22 DT LIC		5.0	3,277	0.0 0	0.0 0			
W22FB-D D22 LD LIC		114.7	11,937	92.8 8,820	92.8 8,820			

WACH D22 DT LIC	36.9	3,636	18.9	1,073	18.9	1,073
WVEB-LD D22 LD LIC	1.0	64	1.0	64	1.0	64
WSPA-TV D22 LD LIC	27.0	7,843	14.0	5,491	14.0	5,491
WBTW D23 DT LIC	31.9	825	13.9	272	13.9	272

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Interference to proposal scenario 1  
5.71% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W34EP-D	D21	LD	APP	SAPPHIRE VALLEY,ETC., NC	W34EP-D Relocation 15K	
Undesireds:	WUNF-TV	D20	DD	LIC	ASHEVILLE, NC	BLANK0000093577	0.0 km
	WABE-TV	D21	DT	LIC	ATLANTA, GA	BLANK0000143418	230.7
	W21DV-D	D21	LD	LIC	BRYSON CITY, NC	BLANK0000080638	80.4
	WUNG-TV	D21	DT	LIC	CONCORD, NC	BLANK0000113063	176.6
	WEBA-TV	D21	DT	LIC	ALLENDAL, SC	BLANK0000145391	249.7
	WKNX-TV	D21	DT	CP	KNOXVILLE, TN	BLANK0000224661	152.6
	WHWV-LD	D21z	LD	CP	Huntington, WV	BLANK0000222217	356.0
	W41BQ	D22-	LD	CP	ASHEVILLE, NC	BLANK0000199272	49.7

Service area	Terrain-limited	IX-free	Percent IX
11154.6 1,153,453	8858.0 986,927	8330.0 930,551	5.96 5.71

Undesired	Total IX	Unique IX	Prcnt Unique IX
WUNF-TV D20 DD LIC	468.2 48,963	439.3 48,504	4.96 4.91
WABE-TV D21 DT LIC	6.0 420	2.0 378	0.02 0.04
W21DV-D D21 LD LIC	8.0 149	5.0 145	0.06 0.01
WUNG-TV D21 DT LIC	71.7 6,037	36.8 5,526	0.42 0.56
WEBA-TV D21 DT LIC	9.0 48	2.0 0	0.02 0.00
WKNX-TV D21 DT CP	2.0 6	1.0 0	0.01 0.00
W41BQ D22- LD CP	5.0 1,312	5.0 1,312	0.06 0.13