

tvstudy v2.2.5 (4uoc83)  
 Database: localhost, Study: WEAE\_MOD-DA-249.9, Model: Longley-Rice  
 Start: 2021.10.18 19:41:55

Study created: 2021.10.18 19:41:55

Study build station data: LMS TV 2021-10-18

Proposal: WEAE-LD D21 LD APP SPRINGFIELD, IL  
 File number: WEAE\_MOD-DA-249.9  
 Facility ID: 181983  
 Station data: User record  
 Record ID: 789  
 Country: U.S.

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

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
Yes	WAND	D20	DT	LIC	DECATUR, IL	BLANK0000115806	68.6 km
No	KNLJ	D20	DT	LIC	JEFFERSON CITY, MO	BLCDT20110121ACA	245.1
No	KEFN-CD	D20z	DC	LIC	ST. LOUIS, MO	BLANK0000146089	137.5
Yes	KGCW	D21	DT	LIC	BURLINGTON, IA	BLANK0000107917	183.9
No	KAJR-LD	D21	LD	LIC	Des moines, IA	BLANK0000106669	378.4
No	W21ED-D	D21	LD	CP	MOUNT VERNON, IL	BLANK0000071888	176.8
No	WEEV-LD	D21	LD	LIC	EVANSVILLE, IN	BLANK0000066968	275.9
No	W21DJ-D	D21	LD	CP	FORT WAYNE, IN	BNPDTL20091228AAU	408.4
No	WJYS	D21	DT	LIC	HAMMOND, IN	BLANK0000087539	286.0
No	WFYI	D21	DT	LIC	INDIANAPOLIS, IN	BLEDT20100803ADB	290.8
No	WRLW-CD	D21-	DC	LIC	SALEM, IN	BLANK0000112941	330.2
No	WZPX-TV	D21	DT	LIC	BATTLE CREEK, MI	BLANK0000087609	464.5
No	K21PD-D	D21	LD	LIC	COLUMBIA, MO	BLANK0000158648	246.9
No	K21PD-D	D21	LD	APP	COLUMBIA, MO	BLANK0000159434	211.9
No	KRFT-LD	D21	LD	LIC	SPRINGFIELD, MO	BLANK0000156037	426.8
No	KTAJ-TV	D21	DT	LIC	ST. JOSEPH, MO	BLCDT20060703AAK	429.9
No	WJKT	D21	DT	LIC	JACKSON, TN	BLANK0000114687	445.7
No	WUXP-TV	D21	DT	LIC	NASHVILLE, TN	BLANK0000159943	461.9
No	WIFS	D21	DT	LIC	JANESVILLE, WI	BLANK0000090143	364.1
Yes	WBUI	D22	DT	LIC	DECATUR, IL	BLCDT20091119ACF	68.1
No	WVDM-LD	D22	LD	LIC	QUINCY, IL	BLANK0000083846	135.2
No	WTVW	D22	DT	LIC	EVANSVILLE, IN	BLANK0000087257	275.2
No	KHQA-TV	D22	DT	CP	HANNIBAL, MO	BLANK0000152836	148.8

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: 39 46 51.20 N (NAD83)  
 Longitude: 89 36 18.20 W  
 Height AMSL: 249.9 m  
 HAAT: 0.0 m  
 Peak ERP: 15.0 kW  
 Antenna: ATC BCC312M-V3-21 270.0 deg  
 Elev Pattn: Generic  
 Elec Tilt: 0.75

49.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	7.22 kW	74.7 m	37.5 km
45.0	6.42	78.6	37.5
90.0	7.54	76.4	37.9
135.0	6.42	74.6	36.9
180.0	7.22	74.3	37.4
225.0	12.1	68.4	39.0
270.0	15.0	65.7	39.6
315.0	12.1	75.9	40.2

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m    Computed HAAT: 74 m

Distance to Canadian border: 596.3 km

Distance to Mexican border: 1545.7 km

Conditions at FCC monitoring station: Allegan MI  
Bearing: 43.0 degrees    Distance: 437.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 276.8 degrees    Distance: 1329.6 km

No land mobile station failures found

Study cell size: 1.00 km

Profile point spacing: 0.10 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 BLANK0000115806 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WAND	D20	DT	LIC	DECATUR, IL	BLANK0000115806	
Undesireds:	WEAE-LD	D21	LD	APP	SPRINGFIELD, IL	WEAE_MOD-DA-249.9	68.6 km
	WWME-CD	D20	DC	LIC	CHICAGO, IL	BLANK0000086882	236.5
	WTSN-CD	D20	DC	LIC	EVANSVILLE, IN	BLDTL20120328AJA	256.8
	WFFT-TV	D20	DT	LIC	FORT WAYNE, IN	BLANK0000086952	333.1
	KNLJ	D20	DT	LIC	JEFFERSON CITY, MO	BLCDT20110121ACA	312.5
	KEFN-CD	D20z	DC	LIC	ST. LOUIS, MO	BLANK0000146089	187.8
	WLWT	D20	DT	LIC	CINCINNATI, OH	BLANK0000157838	380.8
	WHA-TV	D20	DT	LIC	MADISON, WI	BLANK0000089074	349.9
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	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	37414.9	1,388,405	37338.2	1,383,610	37087.8	1,376,658	0.00    0.01
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Undesired			Total IX		Unique IX, before	Unique IX, after	
WEAE-LD D21 LD APP		1.0	191		1.0	191	
WWME-CD D20 DC LIC		161.9	2,401		157.9	1,962	
WTSN-CD D20 DC LIC		1.0	1		0.0	0	
WFFT-TV D20 DT LIC		2.0	1		0.0	0	
KNLJ D20 DT LIC		10.0	1,351		7.0	0	
KEFN-CD D20z DC LIC		68.6	3,157		68.6	3,157	
WLWT D20 DT LIC		5.0	12		3.0	11	
WHA-TV D20 DT LIC		11.9	1,821		5.0	31	

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Interference to BLANK0000107917 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KGCW	D21	DT	LIC	BURLINGTON, IA	BLANK0000107917	
Undesireds:	WEAE-LD	D21	LD	APP	SPRINGFIELD, IL	WEAE_MOD-DA-249.9	183.9 km
	WJYS	D21	DT	LIC	HAMMOND, IN	BLANK0000087539	236.1
	WIFS	D21	DT	LIC	JANESVILLE, WI	BLANK0000090143	204.3
	KPXR-TV	D22	DT	LIC	CEDAR RAPIDS, IA	BLANK0000063428	164.8
	KHQA-TV	D22	DT	CP	HANNIBAL, MO	BLANK0000152836	170.7
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	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	26083.3	947,939	25945.6	937,992	25798.6	933,187	0.45    0.44
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Undesired			Total IX		Unique IX, before	Unique IX, after	
WEAE-LD D21 LD APP		121.6	5,217		115.7	4,123	
WJYS D21 DT LIC		57.1	2,990		29.0	1,917	
WIFS D21 DT LIC		117.0	2,878		86.9	1,805	
KPXR-TV D22 DT LIC		2.0	10		1.0	10	
KHQA-TV D22 DT CP		1.0	0		0.0	0	

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Interference to BLCDT20091119ACF LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WBUI	D22	DT	LIC	DECATUR, IL	BLCDT20091119ACF			
Undesireds:	WEAE-LD	D21	LD	APP	SPRINGFIELD, IL	WEAE_MOD-DA-249.9	68.1 km		
	KPXR-TV	D22	DT	LIC	CEDAR RAPIDS, IA	BLANK0000063428	364.9		
	WLS-TV	D22	DT	CP	CHICAGO, IL	BLANK0000086908	237.1		
	WTVW	D22	DT	LIC	EVANSVILLE, IN	BLANK0000087257	249.0		
	WXIN	D22	DT	LIC	INDIANAPOLIS, IN	BLANK0000153400	224.7		
	KHQA-TV	D22	DT	CP	HANNIBAL, MO	BLANK0000152836	212.6		
	WUSI-TV	D23	DT	LIC	OLNEY, IL	BLANK0000087280	137.5		
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
26392.3		979,459		26385.3		979,332	25195.3 969,574 25194.3 969,383 0.00 0.02		
Undesired				Total IX	Unique IX, before	Unique IX, after			
WEAE-LD D21 LD APP				1.0 191	1.0	191			
KPXR-TV D22 DT LIC				3.0 0	1.0 0	1.0 0			
WLS-TV D22 DT CP				707.2 6,829	601.2 6,422	601.2 6,422			
WTVW D22 DT LIC				281.6 2,187	192.3 1,596	192.3 1,596			
WXIN D22 DT LIC				136.0 577	50.2 244	50.2 244			
KHQA-TV D22 DT CP				234.6 882	145.0 498	145.0 498			
WUSI-TV D23 DT LIC				51.6 373	1.0 0	1.0 0			

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Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WEAE-LD	D21	LD	APP	SPRINGFIELD, IL	WEAE_MOD-DA-249.9			
Undesireds:	WAND	D20	DT	LIC	DECATUR, IL	BLANK0000115806	68.6 km		
	KGCW	D21	DT	LIC	BURLINGTON, IA	BLANK0000107917	183.9		
	K21PD-D	D21	LD	LIC	COLUMBIA, MO	BLANK0000158648	246.9		
	WBUI	D22	DT	LIC	DECATUR, IL	BLCDT20091119ACF	68.1		
Service area		Terrain-limited		IX-free		Percent IX			
4620.4		233,296		4619.4		233,289	4516.9 232,828 2.22 0.20		
Undesired				Total IX	Unique IX	Prct Unique IX			
WAND D20 DT LIC				90.5 408	84.5 404	1.83 0.17			
KGCW D21 DT LIC				12.0 53	12.0 53	0.26 0.02			
WBUI D22 DT LIC				6.0 4	0.0 0	0.00 0.00			