

## **ENGINEERING EXHIBIT**

### **Application for Minor Modification of Digital Low Power Television Station**

prepared for

#### **WBOC, Inc.**

WSJZ-LD Salisbury, MD

Facility ID 187977

Ch. 34 (digital) 9.0 kW

*WBOC, Inc.* (“*WBOC*”) is the licensee of digital Low Power Television station WSJZ-LD, Channel 34, Facility ID 187977, Salisbury MD. WSJZ-LD is licensed to operate (file# 0000068238) with 9.4 kW effective radiated power (“ERP”), directional. *WBOC* herein seeks a minor modification to specify a different directional antenna pattern, to increase antenna height by 45.1 meters, and to decrease ERP to 9.0 kW. No change in channel or site location is proposed.

The existing WSJZ-LD tower structure is associated with FCC Antenna Structure Registration number 1033245. No change to the overall structure height is proposed.

The proposed ERP is 9 kW using a “full service” out of channel emission mask. The proposed transmitting antenna is a side-mounted Dielectric model TLP-8B having horizontal polarization. A plot of the directional antenna’s azimuthal pattern is supplied in Figure 1. Figure 2 depicts the 51 dBμ coverage contours of the proposed and licensed facilities. The use of the same site and corresponding service area overlap demonstrate compliance with §73.3572 for a minor change.

Interference study per OET Bulletin 69<sup>1</sup> shows that the proposal complies with the FCC’s interference protection requirements toward all digital television, television translator, LPTV, and

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<sup>1</sup>FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 (“OET-69”). This analysis employed the FCC’s current “TVStudy” software with the default application processing template settings, 1 km cell size, and 1 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCC’s implementation of TVStudy show excellent correlation.

Class A stations (existing and post-auction). The results, summarized in Table 1, show that any new interference does not exceed the FCC's interference limits (0.5 percent to full power and Class A stations, and 2.0 percent to secondary stations) to any facility.

### **Human Exposure to Radiofrequency Electromagnetic Field**

The proposed facility was evaluated for human exposure to RF energy using the procedures outlined in the FCC's OET Bulletin Number. 65. Based on OET-65 equation (10) and 15 percent antenna relative field in downward elevations (pattern data shows less than 15 percent relative field at angles 15 – 90 degrees below the horizontal), the calculated power density attributable to the proposed facility at locations near the transmitter site at a height of two meters above ground level is  $0.5 \mu\text{W}/\text{cm}^2$ , which is 0.1 percent of the general population / uncontrolled maximum permissible exposure limit. This is well below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal's contribution is less than five percent.

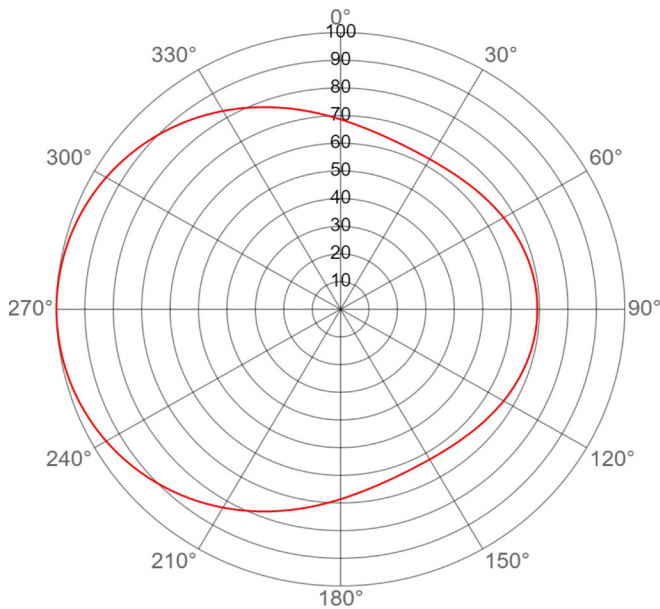
The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower, or antenna from RF electromagnetic field exposure in excess of FCC guidelines. This exhibit is limited to the evaluation of exposure to RF electromagnetic field. No increase in structure height is proposed.

#### List of Attachments

Figure 1	Antenna Azimuthal Pattern
Figure 2	Coverage Contour Comparison
Table 1	TVStudy Analysis of Proposal
Form 2100	Saved Version of Engineering Sections from FCC Form at Time of Upload

### **Chesapeake RF Consultants, LLC**

Joseph M. Davis, P.E.	March 26, 2020	
207 Old Dominion Road	Yorktown, VA 23692	703-650-9600



## Horizontal Polarization AZIMUTH PATTERN

Exhibit No. **20200228 JMD**  
Date **28 Feb 2020**  
Call Letters **WSJZ-LD**  
Channel **34**  
Antenna Type **DLP-8B**  
Location **Salisbury MD**  
Customer **WBOC Inc.**

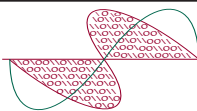
Gain **1.7 (2.30 dB)**  
**Calculated**  
Drawing # **b-pattern**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.686	36	0.629	72	0.680	108	0.680	144	0.629	180	0.686	216	0.857	252	0.983	288	0.983	324	0.857
1	0.682	37	0.629	73	0.682	109	0.679	145	0.628	181	0.690	217	0.861	253	0.985	289	0.981	325	0.852
2	0.679	38	0.630	74	0.683	110	0.678	146	0.628	182	0.694	218	0.866	254	0.986	290	0.979	326	0.847
3	0.675	39	0.631	75	0.684	111	0.676	147	0.627	183	0.698	219	0.871	255	0.988	291	0.977	327	0.842
4	0.672	40	0.632	76	0.685	112	0.675	148	0.627	184	0.702	220	0.875	256	0.990	292	0.974	328	0.837
5	0.668	41	0.633	77	0.686	113	0.673	149	0.627	185	0.707	221	0.880	257	0.991	293	0.972	329	0.833
6	0.665	42	0.634	78	0.687	114	0.672	150	0.627	186	0.711	222	0.884	258	0.992	294	0.970	330	0.828
7	0.662	43	0.635	79	0.688	115	0.670	151	0.627	187	0.715	223	0.889	259	0.993	295	0.967	331	0.823
8	0.659	44	0.637	80	0.689	116	0.669	152	0.627	188	0.720	224	0.893	260	0.995	296	0.964	332	0.818
9	0.656	45	0.638	81	0.689	117	0.667	153	0.627	189	0.724	225	0.897	261	0.996	297	0.962	333	0.813
10	0.653	46	0.639	82	0.690	118	0.666	154	0.628	190	0.729	226	0.902	262	0.997	298	0.959	334	0.808
11	0.651	47	0.641	83	0.690	119	0.664	155	0.628	191	0.734	227	0.906	263	0.997	299	0.956	335	0.803
12	0.648	48	0.642	84	0.691	120	0.662	156	0.629	192	0.738	228	0.910	264	0.998	300	0.953	336	0.798
13	0.646	49	0.644	85	0.691	121	0.661	157	0.630	193	0.743	229	0.914	265	0.999	301	0.950	337	0.793
14	0.643	50	0.646	86	0.692	122	0.659	158	0.631	194	0.748	230	0.918	266	0.999	302	0.946	338	0.788
15	0.641	51	0.647	87	0.692	123	0.657	159	0.632	195	0.753	231	0.922	267	0.999	303	0.943	339	0.783
16	0.639	52	0.649	88	0.692	124	0.655	160	0.633	196	0.758	232	0.925	268	1.000	304	0.940	340	0.778
17	0.638	53	0.650	89	0.692	125	0.654	161	0.635	197	0.763	233	0.929	269	1.000	305	0.936	341	0.773
18	0.636	54	0.652	90	0.692	126	0.652	162	0.636	198	0.768	234	0.933	270	1.000	306	0.933	342	0.768
19	0.635	55	0.654	91	0.692	127	0.650	163	0.638	199	0.773	235	0.936	271	1.000	307	0.929	343	0.763
20	0.633	56	0.655	92	0.692	128	0.649	164	0.639	200	0.778	236	0.940	272	1.000	308	0.925	344	0.758
21	0.632	57	0.657	93	0.692	129	0.647	165	0.641	201	0.783	237	0.943	273	0.999	309	0.922	345	0.753
22	0.631	58	0.659	94	0.692	130	0.646	166	0.643	202	0.788	238	0.946	274	0.999	310	0.918	346	0.748
23	0.630	59	0.661	95	0.691	131	0.644	167	0.646	203	0.793	239	0.950	275	0.999	311	0.914	347	0.743
24	0.629	60	0.662	96	0.691	132	0.642	168	0.648	204	0.798	240	0.953	276	0.998	312	0.910	348	0.738
25	0.628	61	0.664	97	0.690	133	0.641	169	0.651	205	0.803	241	0.956	277	0.997	313	0.906	349	0.734
26	0.628	62	0.666	98	0.690	134	0.639	170	0.653	206	0.808	242	0.959	278	0.997	314	0.902	350	0.729
27	0.627	63	0.667	99	0.689	135	0.638	171	0.656	207	0.813	243	0.962	279	0.996	315	0.897	351	0.724
28	0.627	64	0.669	100	0.689	136	0.637	172	0.659	208	0.818	244	0.964	280	0.995	316	0.893	352	0.720
29	0.627	65	0.670	101	0.688	137	0.635	173	0.662	209	0.823	245	0.967	281	0.993	317	0.889	353	0.715
30	0.627	66	0.672	102	0.687	138	0.634	174	0.665	210	0.828	246	0.970	282	0.992	318	0.884	354	0.711
31	0.627	67	0.673	103	0.686	139	0.633	175	0.668	211	0.833	247	0.972	283	0.991	319	0.880	355	0.707
32	0.627	68	0.675	104	0.685	140	0.632	176	0.672	212	0.837	248	0.974	284	0.990	320	0.875	356	0.702
33	0.627	69	0.676	105	0.684	141	0.631	177	0.675	213	0.842	249	0.977	285	0.988	321	0.871	357	0.698
34	0.628	70	0.678	106	0.683	142	0.630	178	0.679	214	0.847	250	0.979	286	0.986	322	0.866	358	0.694
35	0.628	71	0.679	107	0.682	143	0.629	179	0.682	215	0.852	251	0.981	287	0.985	323	0.861	359	0.690

**Figure 1**  
**Antenna Azimuthal Pattern**  
**WSJZ-LD Salisbury, MD**  
**Facility ID 187977**  
**Ch. 34 (digital) 9.0 kW**

prepared for  
**WBOC, Inc.**

March, 2020

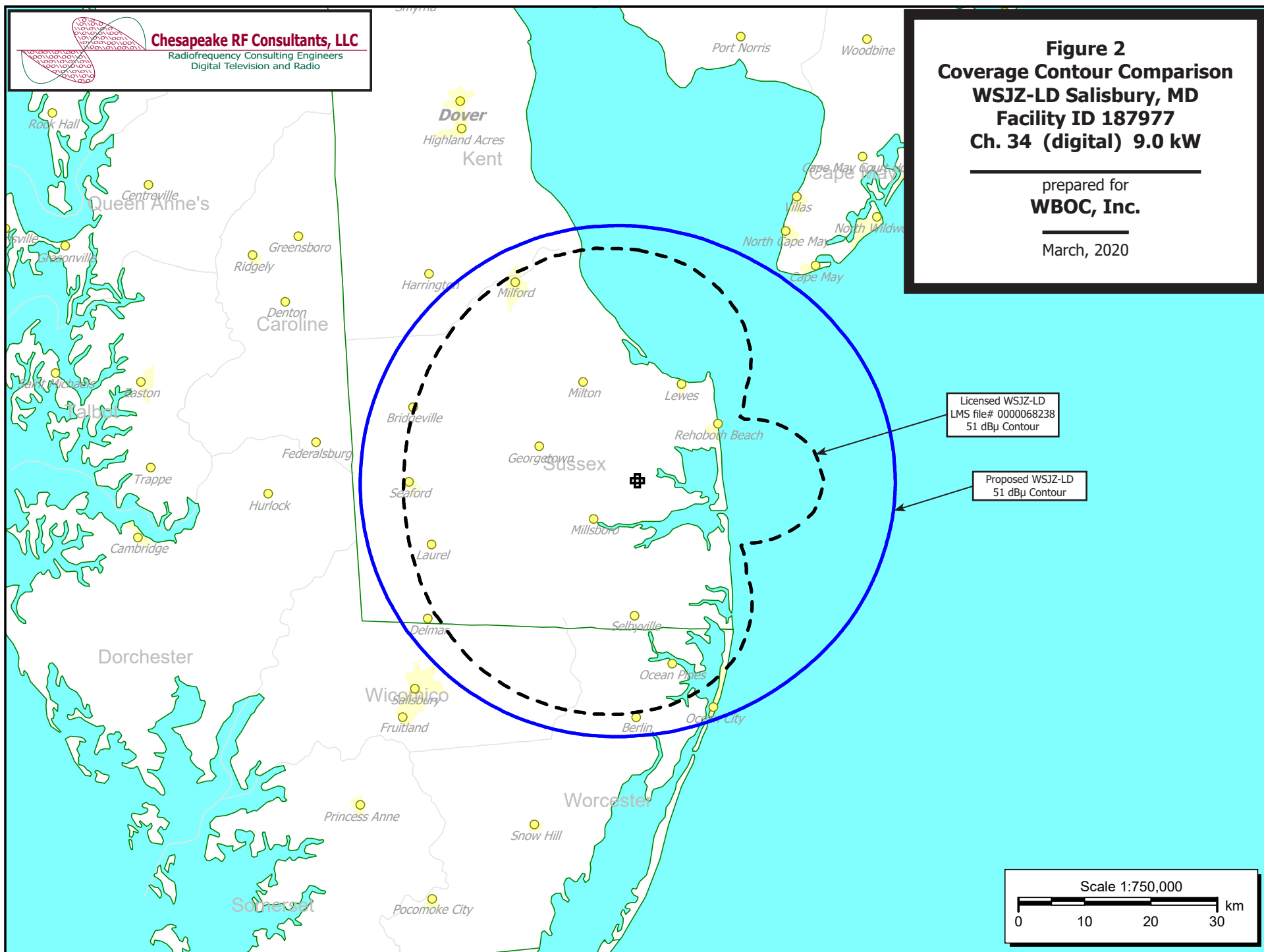


**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

**Figure 2**  
**Coverage Contour Comparison**  
**WSJZ-LD Salisbury, MD**  
**Facility ID 187977**  
**Ch. 34 (digital) 9.0 kW**

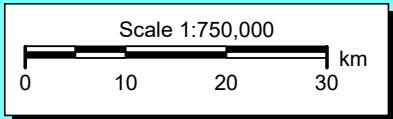
prepared for  
**WBOC, Inc.**

March, 2020



Licensed WSJZ-LD  
LMS file# 0000068238  
51 dBu Contour

Proposed WSJZ-LD  
51 dBu Contour



# **Table 1 WSJZ-LD TVStudy Analysis of Proposal** (page 1 of 4)



tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: WSJZ-LD Mod DLP-8B, Model: Longley-Rice  
Start: 2020.03.26 14:16:41

Study created: 2020.03.26 14:16:41

Study build station data: LMS TV 2020-03-24

Proposal: WSJZ-LD D34 LD APP Salisbury, MD  
File number: WSJZ-LD Mod DLP-8B  
Facility ID: 187977  
Station data: User record  
Record ID: 3055  
Country: U.S.

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

Search options:  
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WEVD-LD	N27+	TX	LIC	DOVER, DE	BLTTL19870929IH	64.8 km
No	WHUT-TV	D33	DT	APP	WASHINGTON, DC	BLANK0000035679	165.0
No	WHUT-TV	D33	DT	LIC	WASHINGTON, DC	BLEDT20071018AIJ	165.0
No	WHUT-TV	D33	DT	CP	WASHINGTON, DC	BPEDT20120627AAD	165.0
No	WPSG	D33	DT	CP	PHILADELPHIA, PA	BLANK0000034323	155.5
No	WZPA-LD	D33	LD	LIC	PHILADELPHIA, PA	BLDTL20120615AAK	155.4
No	WTVZ-TV	D33	DT	LIC	NORFOLK, VA	BLCDT20090602ABA	233.2
No	WTIC-TV	D34	DT	LIC	HARTFORD, CT	BLANK0000080032	395.8
Yes	WRC-TV	D34	DT	LIC	WASHINGTON, DC	BLANK0000079826	164.9
Yes	WPPX-TV	D34	DT	CP	WILMINGTON, DE	BLANK0000034931	155.7
No	WTXX-LD	D34	LD	LIC	SPRINGFIELD, MA	BLANK0000022340	365.4
No	WITN-TV	D34	DT	LIC	WASHINGTON, NC	BLANK0000091433	412.4
No	W34DI-D	D34+	LD	LIC	New York, NY	BLANK0000048491	252.2
No	WPXN-TV	D34	DT	LIC	NEW YORK, NY	BLANK0000086780	252.0
No	W34DI-D	N34+	TX	LIC	New York, NY	BLTTL20070223AHK	305.8
No	W33CR-D	D34	LD	CP	CHAMBERSBURG, PA	BLANK0000053818	268.0
No	WSWB	D34	DT	LIC	SCRANTON, PA	BLANK0000079375	313.4
No	W34EV-D	D34	LD	CP	Charlottesville, VA	BLANK000008300	313.4
No	WHSV-TV	D34	LD	CP	HARRISONBURG, VA	BLANK0000071675	310.3
No	WHSV-TV	D34	LD	LIC	HARRISONBURG, VA	BLANK0000107364	310.3
No	WJHJ-LP	D34+	LD	CP	NEWPORT NEWS, ETC., VA	BLANK0000054621	221.9
No	WZTD-LD	D34	LD	LIC	RICHMOND, VA	BLANK0000093220	243.6
No	WLSL-TV	D34	DT	LIC	ROANOKE, VA	BLANK0000081215	461.1
No	WNPB-TV	D34	DT	LIC	MORGANTOWN, WV	BLANK0000106559	408.8
Yes	W35CS-D	D35	LD	LIC	OCEAN CITY, MD	BLDTL20090803ADY	13.0
No	W35DF-D	D35	LD	CP	SALISBURY, MD	BNPDTL20100204AAW	42.7
No	WNJU	D35	DT	LIC	LINDEN, NJ	BLANK0000079780	252.0
No	WFPA-CD	D35	DC	LIC	PHILADELPHIA, PA	BLANK0000079887	155.4
No	WPXW-TV	D35	DT	LIC	MANASSAS, VA	BLANK0000098055	167.4
No	WDUM-LD	N41z	TX	LIC	SPRINGVILLE, NJ	BLTTL20041117ACS	155.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D34  
Mask: Full Service  
Latitude: 38 38 35.80 N (NAD83)  
Longitude: 75 12 57.40 W  
Height AMSL: 125.0 m  
HAAT: 0.0 m  
Peak ERP: 15.0 kW  
Antenna: DIE DLP-B 270.0 deg  
Elev Pattern: Generic  
Elec Tilt: 1.50

**Table 1 WSJZ-LD TV Study Analysis of Proposal**  
(page 2 of 4)



50.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	7.06 kW	118.5 m	41.1 km
45.0	6.12	120.8	40.6
90.0	7.18	124.3	41.6
135.0	6.12	122.4	40.7
180.0	7.06	118.6	41.1
225.0	12.1	116.8	43.7
270.0	15.0	113.6	44.5
315.0	12.1	113.1	43.4

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 119 m

Distance to Canadian border: 560.7 km

Distance to Mexican border: 2467.7 km

Conditions at FCC monitoring station: Laurel MD

Bearing: 293.2 degrees Distance: 150.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 283.3 degrees Distance: 2570.8 km

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%

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Interference to BLANK0000079826 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WRC-TV	D34	DT	LIC	WASHINGTON, DC	BLANK0000079826	
Undesireds:	WSJZ-LD	D34	LD	APP	Salisbury, MD	WSJZ-LD Mod DLP-8B	164.9 km
	WHUT-TV	D33	DT	APP	WASHINGTON, DC	BLANK0000035679	1.2
	WPPX-TV	D34	DT	CP	WILMINGTON, DE	BLANK0000034931	200.0
	WPXN-TV	D34	DT	LIC	NEW YORK, NY	BLANK0000086780	327.7
	WSWB	D34	DT	LIC	SCRANTON, PA	BLANK0000079375	300.3
	WSLS-TV	D34	DT	LIC	ROANOKE, VA	BLANK0000081215	330.7
	WNPB-TV	D34	DT	LIC	MORGANTOWN, WV	BLANK0000106559	245.3
	WVIR-CD	D35	DC	LIC	CHARLOTTESVILLE, VA	BLANK0000091348	161.6
	WPXW-TV	D35	DT	LIC	MANASSAS, VA	BLANK0000098055	3.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25115.9 8,189,633	24260.9 8,143,362	23933.1 8,106,240	23890.0 8,104,439	0.18 0.02

Undesired	Total IX	Unique IX, before	Unique IX, after
WSJZ-LD D34 LD APP 58.0	2,637	43.1	1,801
WHUT-TV D33 DT APP 12.9	767	7.0	747
WPPX-TV D34 DT CP 47.8	4,901	28.8	2,329
WPXN-TV D34 DT LIC 5.9	570	1.0	2
WSWB D34 DT LIC 7.9	2,138	1.0	16
WSLS-TV D34 DT LIC 37.9	1,568	16.0	1,169
WNPB-TV D34 DT LIC 199.4	21,017	175.6	18,611
WVIR-CD D35 DC LIC 1.0	0	1.0	0
WPXW-TV D35 DT LIC 66.7	11,610	57.7	10,243

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Interference to BLANK0000079826 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WRC-TV	D34	DT	LIC	WASHINGTON, DC	BLANK0000079826	
Undesireds:	WSJZ-LD	D34	LD	APP	Salisbury, MD	WSJZ-LD Mod DLP-8B	164.9 km
	WHUT-TV	D33	DT	LIC	WASHINGTON, DC	BLANK0000035679	1.2
	WPPX-TV	D34	DT	CP	WILMINGTON, DE	BLANK0000034931	200.0

**Table 1 WSJZ-LD TV Study Analysis of Proposal**  
(page 3 of 4)



WPXN-TV	D34	DT	LIC	NEW YORK, NY	BLANK0000086780	327.7
WSWB	D34	DT	LIC	SCRANTON, PA	BLANK0000079375	300.3
WSLS-TV	D34	DT	LIC	ROANOKE, VA	BLANK0000081215	330.7
WNPB-TV	D34	DT	LIC	MORGANTOWN, WV	BLANK0000106559	245.3
WVIR-CD	D35	DC	LIC	CHARLOTTESVILLE, VA	BLANK0000091348	161.6
WPXW-TV	D35	DT	LIC	MANASSAS, VA	BLANK0000098055	3.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25115.9 8,189,633	24260.9 8,143,362	23936.1 8,106,932	23893.0 8,105,131	0.18 0.02

Undesired	Total IX	Unique IX, before	Unique IX, after
WSJZ-LD D34 LD APP	58.0 2,637	43.1 1,801	
WHUT-TV D33 DT LIC	5.0 55	4.0 55	
WPPX-TV D34 DT CP	47.8 4,901	25.8 2,329	
WPXN-TV D34 DT LIC	5.9 570	1.0 2	
WSWB D34 DT LIC	7.9 2,138	1.0 16	
WSLS-TV D34 DT LIC	37.9 1,568	15.0 1,115	
WNPB-TV D34 DT LIC	199.4 21,017	172.6 18,502	
WVIR-CD D35 DC LIC	1.0 0	1.0 0	
WPXW-TV D35 DT LIC	66.7 11,610	58.7 10,077	

Interference to BLANK0000079826 LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WRC-TV	D34	DT	LIC	WASHINGTON, DC	BLANK0000079826	
Undesireds:	WSJZ-LD	D34	LD	APP	Salisbury, MD	WSJZ-LD Mod DLP-8B	164.9 km
	WHUT-TV	D33	DT	CP	WASHINGTON, DC	BPEDT20120627AAD	1.2
	WPPX-TV	D34	DT	CP	WILMINGTON, DE	BLANK0000034931	200.0
	WPXN-TV	D34	DT	LIC	NEW YORK, NY	BLANK0000086780	327.7
	WSWB	D34	DT	LIC	SCRANTON, PA	BLANK0000079375	300.3
	WSLS-TV	D34	DT	LIC	ROANOKE, VA	BLANK0000081215	330.7
	WNPB-TV	D34	DT	LIC	MORGANTOWN, WV	BLANK0000106559	245.3
	WVIR-CD	D35	DC	LIC	CHARLOTTESVILLE, VA	BLANK0000091348	161.6
	WPXW-TV	D35	DT	LIC	MANASSAS, VA	BLANK0000098055	3.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25115.9 8,189,633	24260.9 8,143,362	23888.2 8,096,125	23856.1 8,095,184	0.13 0.01

Undesired	Total IX	Unique IX, before	Unique IX, after
WSJZ-LD D34 LD APP	58.0 2,637	32.1 941	
WHUT-TV D33 DT CP	77.7 13,395	40.8 10,002	
WPPX-TV D34 DT CP	47.8 4,901	20.8 881	
WPXN-TV D34 DT LIC	5.9 570	1.0 2	
WSWB D34 DT LIC	7.9 2,138	1.0 16	
WSLS-TV D34 DT LIC	37.9 1,568	15.0 1,115	
WNPB-TV D34 DT LIC	199.4 21,017	171.6 18,435	
WVIR-CD D35 DC LIC	1.0 0	1.0 0	
WPXW-TV D35 DT LIC	66.7 11,610	44.8 9,143	

Interference to BLANK0000034931 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPPX-TV	D34	DT	CP	WILMINGTON, DE	BLANK0000034931	
Undesireds:	WSJZ-LD	D34	LD	APP	Salisbury, MD	WSJZ-LD Mod DLP-8B	155.7 km
	WPSG	D33	DT	CP	PHILADELPHIA, PA	BLANK0000034323	0.2
	WTIC-TV	D34	DT	LIC	HARTFORD, CT	BLANK0000080032	273.8
	WRC-TV	D34	DT	LIC	WASHINGTON, DC	BLANK0000079826	200.0
	WPXN-TV	D34	DT	LIC	NEW YORK, NY	BLANK0000086780	127.8
	WFXV	D34	DT	CP	UTICA, NY	BLANK0000029986	344.7
	WSWB	D34	DT	LIC	SCRANTON, PA	BLANK0000079375	160.1
	WNJU	D35	DT	LIC	LINDEN, NJ	BLANK0000079780	127.8
	WFPA-CD	D35	DC	LIC	PHILADELPHIA, PA	BLANK0000079887	0.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
20621.5 7,965,284	19956.9 7,767,295	16739.5 6,884,304	16642.3 6,883,173	0.58 0.02

Undesired	Total IX	Unique IX, before	Unique IX, after
WSJZ-LD D34 LD APP	110.2 3,660	97.2 1,131	
WPSG D33 DT CP	546.6 116,098	314.2 75,536	



**Table 1 WSJZ-LD TV Study Analysis of Proposal**  
(page 4 of 4)



WTIC-TV D34 DT LIC	3.0	1,123	0.0	0	0.0	0
WRC-TV D34 DT LIC	677.2	151,285	254.8	35,538	251.8	35,538
WPXN-TV D34 DT LIC	2566.5	712,662	1819.1	512,502	1818.1	512,488
WFXV D34 DT CP	1.0	87	0.0	0	0.0	0
WSWB D34 DT LIC	157.7	98,171	31.9	44,783	30.9	44,733
WNJU D35 DT LIC	243.5	84,345	0.0	0	0.0	0
WFFA-CD D35 DC LIC	10.0	804	6.0	469	6.0	469

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Interference to BLDLTL20090803ADY LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W35CS-D	D35	LD	LIC	OCEAN CITY, MD	BLDNL20090803ADY	
Undesireds:	WSJZ-LD	D34	LD	APP	Salisbury, MD	WSJZ-LD Mod DLP-8B	13.0 km
	W35DF-D	D35	LD	CP	SALISBURY, MD	BNPDL20100204AAW	29.7
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	2110.2	193,423	2110.2	193,423	2010.7	160,879	2003.7 160,719 0.35 0.10
Undesired			Total IX	Unique IX, before		Unique IX, after	
WSJZ-LD D34 LD APP	7.0	160			7.0	160	
W35DF-D D35 LD CP	99.4	32,544	99.4	32,544	99.4	32,544	

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Interference to proposal scenario 1  
11.41% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WSJZ-LD	D34	LD	APP	Salisbury, MD	WSJZ-LD Mod DLP-8B	
Undesireds:	WRC-TV	D34	DT	LIC	WASHINGTON, DC	BLANK0000079826	164.9 km
	W34DI-D	D34+	LD	LIC	New York, NY	BLANK0000048491	252.2
	WHSV-TV	D34	LD	CP	HARRISONBURG, VA	BLANK0000071675	310.3
	W35CS-D	D35	LD	LIC	OCEAN CITY, MD	BLDNL20090803ADY	13.0
	W35DF-D	D35	LD	CP	SALISBURY, MD	BNPDL20100204AAW	42.7
	Service area	Terrain-limited		IX-free		Percent IX	
	5574.1	281,939	5574.1	281,939	5357.4	249,766	3.89 11.41
Undesired			Total IX	Unique IX		Prcnt Unique IX	
WRC-TV D34 DT LIC	7.0	79	7.0	79	0.13	0.03	
W35CS-D D35 LD LIC	209.8	32,094	206.8	31,289	3.71	11.10	
W35DF-D D35 LD CP	3.0	805	0.0	0	0.00	0.00	



**Channel and Facility Information**

Section	Question	Response
Facility ID	187977	
State	Maryland	
City	Salisbury	
LPD Channel	34	

**Antenna Location Data**

Section	Question	Response
<b>Antenna Structure Registration</b>	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1033245
<b>Coordinates (NAD83)</b>	Latitude	38° 38' 35.8" N+
	Longitude	075° 12' 57.4" W-
	Structure Type	GTOWER-Guyed Structure Used for Communication Purposes
	Overall Structure Height	122.5 meters
	Support Structure Height	122.2 meters
	Ground Elevation (AMSL)	6.7 meters
<b>Antenna Data</b>	Height of Radiation Center Above Ground Level	118.3 meters
	Height of Radiation Center Above Mean Sea Level	125.0 meters
	Effective Radiated Power	9.0 kW

**Antenna  
Technical Data**

Section	Question	Response
Antenna Type	Antenna Type	Directional Custom
	Do you have an Antenna ID?	No
	Antenna ID	
Antenna Manufacturer and Model	Manufacturer:	DIE
	Model	DLP-8B
	Rotation	270 degrees
	Electrical Beam Tilt	1.5
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Horizontal
Elevation Radiation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
	Uploaded file for elevation antenna (or radiation) pattern data	
	Out-of-Channel Emission Mask:	Full Service

**Directional Antenna Relative Field Values (Pre-rotated Pattern)**

Degree	Value	Degree	Value	Degree	Value	Degree	Value
0	1.000	90	0.686	180	0.692	270	0.686
10	0.995	100	0.653	190	0.689	280	0.729
20	0.979	110	0.633	200	0.678	290	0.778
30	0.953	120	0.627	210	0.662	300	0.828
40	0.918	130	0.632	220	0.646	310	0.875
50	0.875	140	0.646	230	0.632	320	0.918
60	0.828	150	0.662	240	0.627	330	0.953
70	0.778	160	0.678	250	0.633	340	0.979
80	0.729	170	0.689	260	0.653	350	0.995

**Additional Azimuths**

Degree	V <sub>A</sub>
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