

## **W276AV Displacement Waiver Request and Justification**

This application requests a displacement waiver from Channel 276 to Channel 288, and processing as a minor change.

As of December 2015, the applicant is the new translator permittee, having just consummated an Assignment of License pursuant to BALFT-20150812AAX.

During discussions that ultimately led to agreement for the license assignment, and eight months prior to the filing of Form 345 to assign the license, co-channel Class A station WBZO at Bayshore, NY changed from directional operation to non-directional. As a result, the ERP of WBZO toward the service area of W276AV increased substantially.

Listeners to the translator signal have reported experiencing new and heavy interference in greater Stamford and up and down I-95 and US 1, the major thoroughfares through Stamford. The interference that resulted from the increase in power from WBZO toward the translator's previous service area has been confirmed in numerous locations both by listener complaints and by the observations of station personnel.

The table below compares antenna field values and ERP toward the translator on a direct bearing of 322.5 degrees from WBZO. Compared are the current non-directional operation of WBZO, the original authorized directional composite pattern, and the separate vertical and horizontal field values from the original directional antenna proof. The original antenna proof is provided as Appendix A to this exhibit.

Had the WBZO directional antenna fully filled out the authorized directional composite envelope in the direction of the translator, the ERP increase in both the horizontal and vertical planes would have been less than 3 dB.

However, the antenna proof reveals that in practice, in the direction of the translator the directional antenna fell well short of the composite envelope in the vertical plane, and attained less than half of the allowed composite ERP in the horizontal plane.

Because of this, the change from directional to the present WBZO non-directional operation at 1.55 kW increased its actual ERP toward the translator by 141% or 3.82 dB in the vertical plane, and by 379% or 6.8 dB in the horizontal plane.

<b>WBZO Field Toward W276AV (322.5 Degrees T)</b>	<b>Antenna Field Value</b>	<b>ERP (kW)</b>	<b>ERP Change As A Result Of WBZO Change to Non-Directional</b>	
			<b>%</b>	<b>dB</b>
<b>Authorized Composite DA</b>	<b>0.710</b>	<b>0.781</b>	<b>98%</b>	<b>2.97</b>
<b>DA Proof (Horizontal Plane)</b>	<b>0.457</b>	<b>0.324</b>	<b>379%</b>	<b>6.80</b>
<b>DA Proof (Vertical Plane)</b>	<b>0.644</b>	<b>0.643</b>	<b>141%</b>	<b>3.82</b>
<b>Present WBZO Non-Directional Operation</b>	<b>1.000</b>	<b>1.550</b>	<b>0%</b>	<b>0.00</b>

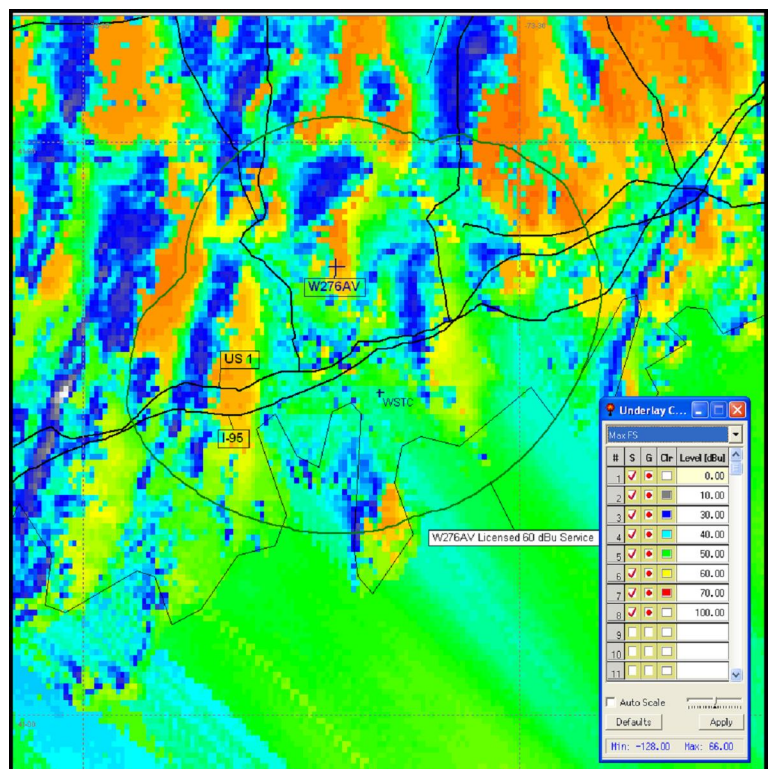
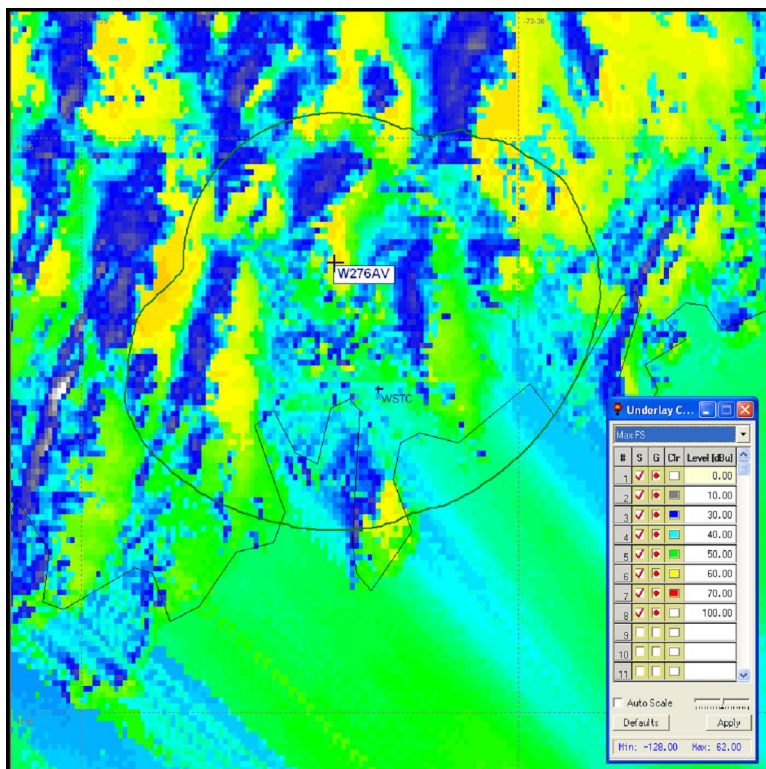
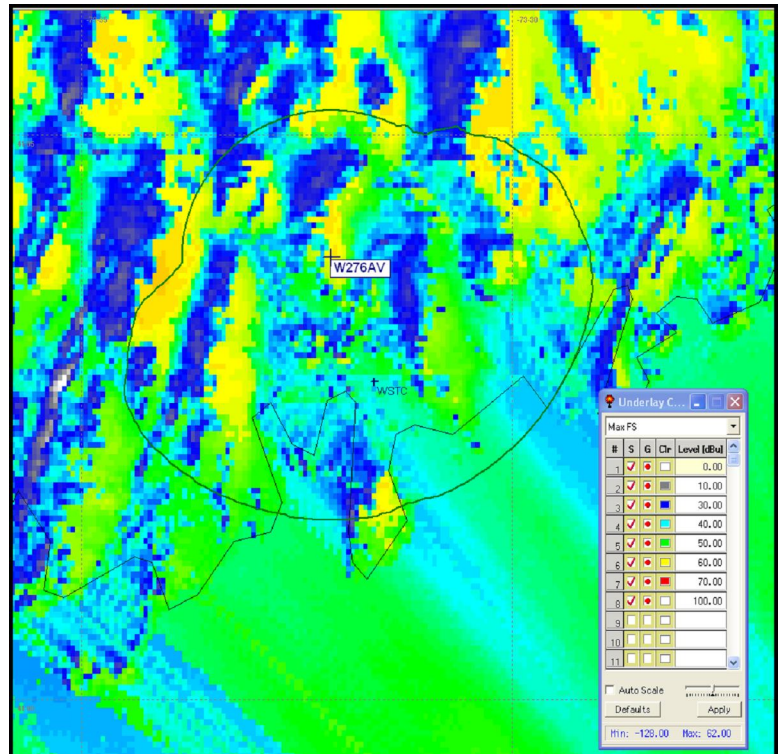
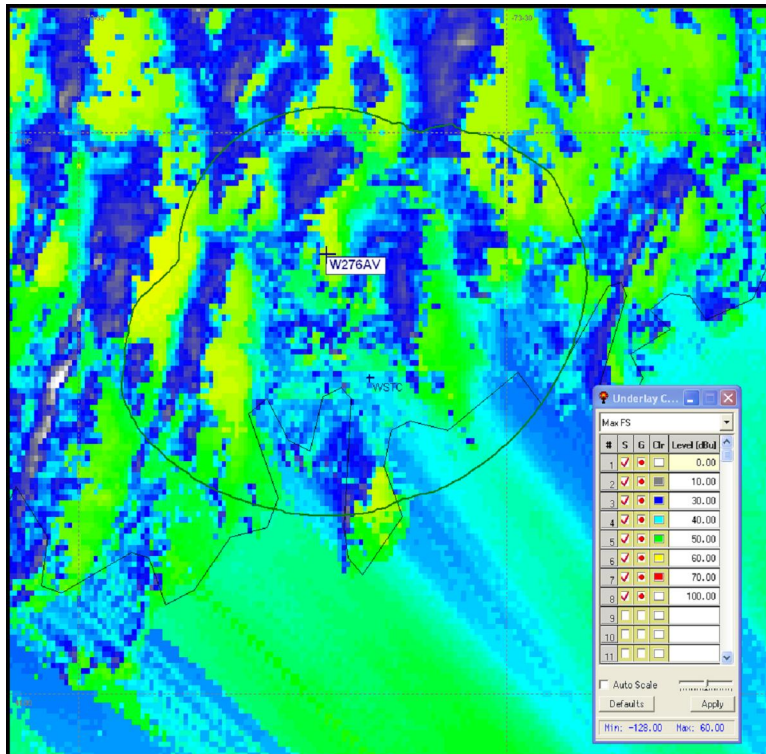
The increase in interference to the translator is illustrated in the Longley-Rice studies below, showing the increase in signal strength in the WBZO signal within the translator 60 dBu Service Contour. Major roads I-95 and US 1 are also shown in bottom right.

Top Left: Antenna Proof of Performance - Horizontal Polarization

Top Right: Antenna Proof of Performance - Vertical Polarization

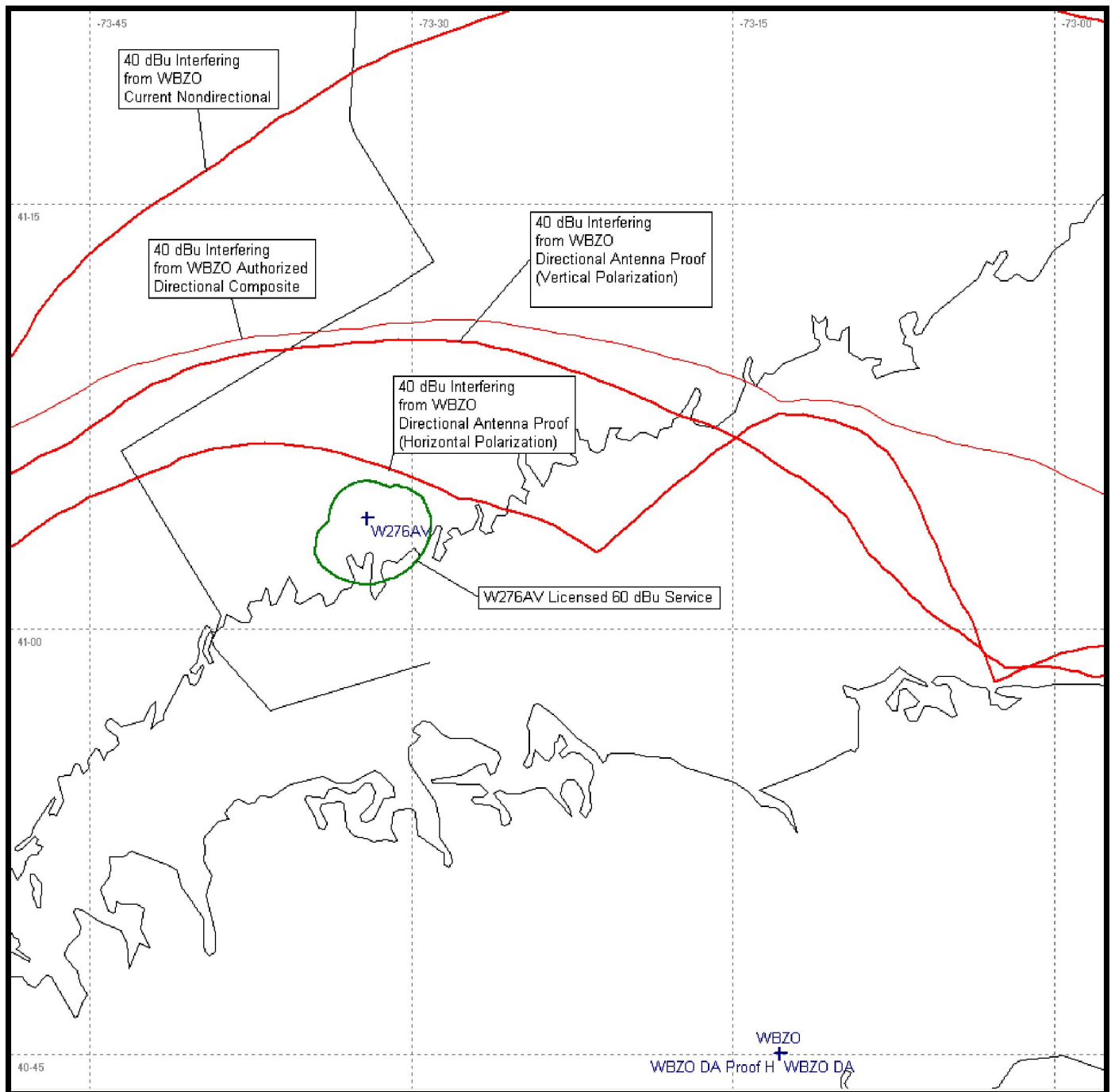
Bottom Left: Directional Composite Employed Previously (BLH-20021008AAG)

Bottom Right: Non-Directional Employed Presently (BLH-20141218AFF)





The figure below illustrates the extent to which the WBZO 40 dBu F(50,10) interfering contour has been extended farther into and beyond the translator service area as result of the change to non-directional operation. To the extent that the translator already had experienced some interference (because the WBZO interfering contour already extended into the translator service contour and somewhat beyond, though primarily in the vertical plane), that interfering contour now extends about twice as far beyond the translator service contour as it did before WBZO changed to non-directional operation.



Prior to resorting to a request for a displacement waiver, the applicant considered all possible channels that would be eligible for a minor change without such a waiver. These are channels 273, 274, 275, 277, 278, and 279, and IF-spaced channels 222 and 223. None of these channels would comply with Section 74.1204, as shown in the individual channel studies below. The applicant has determined both from studies and from listening tests that Channel 288 best complies with Section 74.1204 while allowing for the least possible interference to any station's actual listening area. It also receives the least incoming interference in the licensed and proposed translator service areas. The applicant therefore respectfully requests processing as a minor change in order to facilitate the continuation of useful service to the public as a fill-in for WSTC(AM).

### **Channel 273**

Call Sign ▼	ST	City	Freq.	Ch#	ERPower	Class	Status	D	Sep	Clr
W273CN	CT	WESTPORT	102.5	273	150.0	D	CP MOD	20.72	0.00	9.73 dB
W276AQ	NJ	FORT LEE	102.3	272	60.0	D	CP	44.43	0.00	16.69 dB
WBAB	NY	BABYLON	102.3	272	3200.0	A	LIC	33.97	0.00	7.56 dB
WBAB	NY	BABYLON	102.3	272	6000.0	A	LIC	33.97	0.00	4.83 dB
WBAB	NY	BABYLON	102.3	272	6000.0	A	LIC	33.97	0.00	2.28 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	13.45 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	13.45 dB
WBZO	NY	BAY SHORE	103.1	276	3000.0	A	LIC	44.04	0.00	19.28 dB
WDRC-FM	CT	HARTFORD	102.9	275	2300.0	B	CP	79.94	0.00	16.49 dB
WDRC-FM	CT	HARTFORD	102.9	275	15000.0	B	USE	79.94	0.00	9.46 dB
WDRC-FM	CT	HARTFORD	102.9	275	19540.0	B	LIC	79.94	0.00	12.66 dB
WDRC-FM	CT	HARTFORD	102.9	275	21700.0	B	LIC	79.94	0.00	6.74 dB
WFAN-FM	NY	NEW YORK	101.9	270	390.0	B	LIC	51.80	0.00	5.74 dB
WFAN-FM	NY	NEW YORK	101.9	270	3300.0	B	LIC	56.27	0.00	-2.49 dB
WFAN-FM	NY	NEW YORK	101.9	270	4600.0	B	LIC	51.80	0.00	-4.37 dB
WFAN-FM	NY	NEW YORK	101.9	270	6200.0	B	LIC	51.80	0.00	-6.70 dB
WFAN-FM	NY	NEW YORK	101.9	270	29500.0	B	LIC	68.03	0.00	0.81 dB
WSLX	CT	NEW CANAAN	91.9	220	19.0	D	LIC	14.47	0.00	14.5
WWFS	NY	NEW YORK	102.7	274	4600.0	B	LIC	51.80	0.00	-8.30 dB
WWFS	NY	NEW YORK	102.7	274	6000.0	B	LIC	51.80	0.00	-10.46 dB
WWFS	NY	NEW YORK	102.7	274	50000.0	B	LIC	56.30	0.00	-22.64 dB

### Channel 274

Call Sign ▼	ST	City	Freq.	Ch#	ERPower	Class	Status	D	Sep	Cr
WBAB	NY	BABYLON	102.3	272	3200.0	A	LIC	33.97	0.00	11.91 dB
WBAB	NY	BABYLON	102.3	272	6000.0	A	LIC	33.97	0.00	9.18 dB
WBAB	NY	BABYLON	102.3	272	6000.0	A	LIC	33.97	0.00	6.34 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	13.45 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	13.45 dB
WBZO	NY	BAY SHORE	103.1	276	3000.0	A	LIC	44.04	0.00	19.28 dB
WDRF-FM	CT	HARTFORD	102.9	275	2300.0	B	CP	79.94	0.00	13.29 dB
WDRF-FM	CT	HARTFORD	102.9	275	15000.0	B	USE	79.94	0.00	6.27 dB
WDRF-FM	CT	HARTFORD	102.9	275	19540.0	B	LIC	79.94	0.00	10.16 dB
WDRF-FM	CT	HARTFORD	102.9	275	21700.0	B	LIC	79.94	0.00	3.54 dB
WSLX	CT	NEW CANAAN	91.9	220	19.0	D	LIC	14.47	0.00	14.5
WWFS	NY	NEW YORK	102.7	274	0.0	B	USE	51.80	0.00	16.30 dB
WWFS	NY	NEW YORK	102.7	274	4600.0	B	LIC	51.80	0.00	-14.50 dB
WWFS	NY	NEW YORK	102.7	274	6000.0	B	LIC	51.80	0.00	-16.54 dB
WWFS	NY	NEW YORK	102.7	274	50000.0	B	LIC	56.30	0.00	-36.64 dB

### Channel 275

Call Sign ▼	ST	City	Freq.	Ch#	ERPower	Class	Status	D	Sep	Cr
W276AQ	NJ	FORT LEE	103.1	276	35.0	D	LIC	44.43	0.00	19.89 dB
W276BV	CT	GREENWICH	103.1	276	2.0	D	LIC	11.33	0.00	11.23 dB
W276BV	NY	NEW ROCHELLE	103.1	276	3.0	D	APP	26.85	0.00	19.39 dB
W276BV	NY	NEW ROCHELLE	103.1	276	85.0	D	APP	26.85	0.00	13.82 dB
WBAB	NY	BABYLON	102.3	272	3200.0	A	LIC	33.97	0.00	11.91 dB
WBAB	NY	BABYLON	102.3	272	6000.0	A	LIC	33.97	0.00	9.18 dB
WBAB	NY	BABYLON	102.3	272	6000.0	A	LIC	33.97	0.00	6.34 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	10.29 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	10.29 dB
WBZO	NY	BAY SHORE	103.1	276	3000.0	A	LIC	44.04	0.00	15.90 dB
WDRF-FM	CT	HARTFORD	102.9	275	2300.0	B	CP	79.94	0.00	8.89 dB
WDRF-FM	CT	HARTFORD	102.9	275	15000.0	B	USE	79.94	0.00	1.86 dB
WDRF-FM	CT	HARTFORD	102.9	275	19540.0	B	LIC	79.94	0.00	6.26 dB
WDRF-FM	CT	HARTFORD	102.9	275	21700.0	B	LIC	79.94	0.00	-1.77 dB
WKTU	NY	LAKE SUCCESS	103.5	278	1900.0	B	LIC	50.42	0.00	5.35 dB
WKTU	NY	LAKE SUCCESS	103.5	278	6000.0	B	LIC	51.80	0.00	-6.58 dB
WKTU	NY	LAKE SUCCESS	103.5	278	13000.0	B	LIC	51.25	0.00	-6.83 dB
WKTU	NY	LAKE SUCCESS	103.5	278	17000.0	B	LIC	51.25	0.00	-6.88 dB
WWFS	NY	NEW YORK	102.7	274	4600.0	B	LIC	51.80	0.00	-8.30 dB
WWFS	NY	NEW YORK	102.7	274	6000.0	B	LIC	51.80	0.00	-10.46 dB
WWFS	NY	NEW YORK	102.7	274	50000.0	B	LIC	56.30	0.00	-22.64 dB

### Channel 277

Call Sign ▼	ST	City	Freq.	Ch#	ERPower	Class	Status	D	Sep	Clr
W276AQ	NJ	FORT LEE	103.1	276	35.0	D	LIC	44.43	0.00	19.89 dB
W276BV	CT	GREENWICH	103.1	276	2.0	D	LIC	11.33	0.00	11.23 dB
W276BV	NY	NEW ROCHELLE	103.1	276	3.0	D	APP	26.85	0.00	19.39 dB
W276BV	NY	NEW ROCHELLE	103.1	276	85.0	D	APP	26.85	0.00	13.82 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	10.29 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	10.29 dB
WBZO	NY	BAY SHORE	103.1	276	3000.0	A	LIC	44.04	0.00	15.90 dB
WDRC-FM	CT	HARTFORD	102.9	275	2300.0	B	CP	79.94	0.00	16.49 dB
WDRC-FM	CT	HARTFORD	102.9	275	15000.0	B	USE	79.94	0.00	9.46 dB
WDRC-FM	CT	HARTFORD	102.9	275	19540.0	B	LIC	79.94	0.00	12.66 dB
WDRC-FM	CT	HARTFORD	102.9	275	21700.0	B	LIC	79.94	0.00	6.74 dB
WKTU	NY	LAKE SUCCESS	103.5	278	1900.0	B	LIC	50.42	0.00	1.37 dB
WKTU	NY	LAKE SUCCESS	103.5	278	6000.0	B	LIC	51.80	0.00	-10.46 dB
WKTU	NY	LAKE SUCCESS	103.5	278	13000.0	B	LIC	51.25	0.00	-11.90 dB
WKTU	NY	LAKE SUCCESS	103.5	278	17000.0	B	LIC	51.25	0.00	-10.84 dB
WNBM	NY	BRONXVILLE	103.9	280	980.0	A	LIC	35.44	0.00	7.70 dB
WNBM	NY	BRONXVILLE	103.9	280	1300.0	A	LIC	35.44	0.00	8.06 dB
WWFS	NY	NEW YORK	102.7	274	4600.0	B	LIC	51.80	0.00	-4.37 dB
WWFS	NY	NEW YORK	102.7	274	6000.0	B	LIC	51.80	0.00	-6.58 dB
WWFS	NY	NEW YORK	102.7	274	50000.0	B	LIC	56.30	0.00	0.65 dB

### Channel 278

Call Sign ▼	ST	City	Freq.	Ch#	ERPower	Class	Status	D	Sep	Clr
W279CI	CT	DANBURY	103.7	279	250.0	D	LIC	35.10	0.00	15.96 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	13.45 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	13.45 dB
WBZO	NY	BAY SHORE	103.1	276	3000.0	A	LIC	44.04	0.00	19.28 dB
WDRC-FM	CT	HARTFORD	102.9	275	2300.0	B	CP	79.94	0.00	16.49 dB
WDRC-FM	CT	HARTFORD	102.9	275	15000.0	B	USE	79.94	0.00	9.46 dB
WDRC-FM	CT	HARTFORD	102.9	275	19540.0	B	LIC	79.94	0.00	12.66 dB
WDRC-FM	CT	HARTFORD	102.9	275	21700.0	B	LIC	79.94	0.00	6.74 dB
WKTU	NY	LAKE SUCCESS	103.5	278	0.0	B	USE	56.34	0.00	18.00 dB
WKTU	NY	LAKE SUCCESS	103.5	278	1900.0	B	LIC	50.42	0.00	-9.15 dB
WKTU	NY	LAKE SUCCESS	103.5	278	6000.0	B	LIC	51.80	0.00	-16.54 dB
WKTU	NY	LAKE SUCCESS	103.5	278	13000.0	B	LIC	51.25	0.00	-17.54 dB
WKTU	NY	LAKE SUCCESS	103.5	278	17000.0	B	LIC	51.25	0.00	-17.15 dB
WMRQ-FM	CT	WATERBURY	104.1	281	14000.0	B	LIC	79.88	0.00	10.54 dB
WNBM	NY	BRONXVILLE	103.9	280	980.0	A	LIC	35.44	0.00	7.70 dB
WNBM	NY	BRONXVILLE	103.9	280	1300.0	A	LIC	35.44	0.00	8.06 dB

### Channel 279

Call Sign ▼	ST	City	Freq.	Ch#	ERPower	Class	Status	D	Sep	Clr
W279AJ	NY	HIGHLAND	103.7	279	10.0	D	LIC	80.59	0.00	17.23 dB
W279AJ	NY	HIGHLAND	103.7	279	250.0	D	CP	80.59	0.00	15.76 dB
W279CI	CT	DANBURY	103.7	279	250.0	D	LIC	35.10	0.00	1.96 dB
WAXQ	NY	NEW YORK	104.3	282	6000.0	B	LIC	51.80	0.00	-6.58 dB
WAXQ	NY	NEW YORK	104.3	282	13000.0	B	LIC	51.25	0.00	-6.83 dB
WAXQ	NY	NEW YORK	104.3	282	17000.0	B	LIC	51.25	0.00	-6.88 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	13.45 dB
WBZO	NY	BAY SHORE	103.1	276	1550.0	A	LIC	44.19	0.00	13.45 dB
WBZO	NY	BAY SHORE	103.1	276	3000.0	A	LIC	44.04	0.00	19.28 dB
WKTU	NY	LAKE SUCCESS	103.5	278	1900.0	B	LIC	50.42	0.00	1.37 dB
WKTU	NY	LAKE SUCCESS	103.5	278	6000.0	B	LIC	51.80	0.00	-10.46 dB
WKTU	NY	LAKE SUCCESS	103.5	278	13000.0	B	LIC	51.25	0.00	-11.90 dB
WKTU	NY	LAKE SUCCESS	103.5	278	17000.0	B	LIC	51.25	0.00	-10.84 dB
WMRQ-FM	CT	WATERBURY	104.1	281	14000.0	B	LIC	79.88	0.00	10.54 dB
WNBM	NY	BRONXVILLE	103.9	280	980.0	A	LIC	35.44	0.00	4.29 dB
WNBM	NY	BRONXVILLE	103.9	280	1300.0	A	LIC	35.44	0.00	4.53 dB

### Channel 222

Call Sign ▼	ST	City	Freq.	Ch#	ERPower	Class	Status	D	Sep	Clr
W276BV	CT	GREENWICH	103.1	276	2.0	D	LIC	11.33	0.00	11.3
WBMP	NY	NEW YORK	92.3	222	0.0	B	USE	51.80	0.00	16.30 dB
WBMP	NY	NEW YORK	92.3	222	6000.0	B	LIC	51.80	0.00	-16.54 dB
WBMP	NY	NEW YORK	92.3	222	18000.0	B	LIC	51.13	0.00	-16.31 dB
WQBU-FM	NY	GARDEN CITY	92.7	224	2000.0	A	LIC	37.40	0.00	6.64 dB
WSHR	NY	LAKE RONKONK	91.9	220	6000.0	A	LIC	44.62	0.00	13.87 dB
WSLX	CT	NEW CANAAN	91.9	220	19.0	D	LIC	14.47	0.00	12.42 dB
WWYZ	CT	WATERBURY	92.5	223	5000.0	B	LIC	79.97	0.00	8.79 dB
WWYZ	CT	WATERBURY	92.5	223	17000.0	B	LIC	79.97	0.00	3.21 dB
WXCJ	CT	DANBURY	91.7	219	3000.0	A	LIC	36.84	0.00	18.29 dB

### Channel 223

Call Sign ▼	ST	City	Freq.	Ch#	ERPower	Class	Status	D	Sep	Clr
W276BV	CT	GREENWICH	103.1	276	2.0	D	LIC	11.33	0.00	11.3
WBMP	NY	NEW YORK	92.3	222	6000.0	B	LIC	51.80	0.00	-10.46 dB
WBMP	NY	NEW YORK	92.3	222	18000.0	B	LIC	51.13	0.00	-10.03 dB
WPAT-FM	NJ	PATERSON	93.1	226	4000.0	B	APP	51.80	0.00	-4.82 dB
WPAT-FM	NJ	PATERSON	93.1	226	5400.0	B	LIC	56.27	0.00	-4.58 dB
WPAT-FM	NJ	PATERSON	93.1	226	7500.0	B	LIC	51.25	0.00	-4.45 dB
WPAT-FM	NJ	PATERSON	93.1	226	22000.0	B	LIC	59.58	0.00	2.20 dB
WGBU-FM	NY	GARDEN CITY	92.7	224	2000.0	A	LIC	37.40	0.00	3.00 dB
WSHR	NY	LAKE RONKONK	91.9	220	6000.0	A	LIC	44.62	0.00	13.87 dB
WSLX	CT	NEW CANAAN	91.9	220	19.0	D	LIC	14.47	0.00	12.42 dB
WWYZ	CT	WATERBURY	92.5	223	5000.0	B	LIC	79.97	0.00	4.46 dB
WWYZ	CT	WATERBURY	92.5	223	17000.0	B	LIC	79.97	0.00	-2.24 dB



## Appendix A – WBZO Directional Antenna Proof Of Performance

# **ERI® Horizontal Plane Relative Field List**

Electronics Research, Inc. 7777 Gardner Rd. Chandler, In 47610 Phone (812) 925-6000 Fax (812) 925-4030 <http://www.eriinc.com/>

**Station: WBZO**  
**Location: Bay Shore, NY**  
**Frequency: 103.1 MHz**

**Antenna: LP-2E-DA-HW**  
**Orientation: 197° True**  
**Tower: 55 3/4" face Rohn tower**

**Figure: 2**  
**Date: 8/21/02**  
**Reference: wbzo1m.fig**

Angle	Horizontal			Vertical			Angle	Horizontal			Vertical		
	Field	kW	dBk	Field	kW	dBk		Field	kW	dBk	Field	kW	dBk
0°	0.279	0.12	-9.17	0.233	0.08	-10.77	180°	0.931	1.34	1.28	0.638	0.63	-2.01
5°	0.283	0.12	-9.05	0.206	0.07	-11.81	185°	0.908	1.28	1.06	0.611	0.58	-2.37
10°	0.266	0.11	-9.59	0.184	0.05	-12.79	190°	0.873	1.18	0.72	0.595	0.55	-2.61
15°	0.228	0.08	-10.94	0.167	0.04	-13.67	195°	0.832	1.07	0.31	0.589	0.54	-2.70
20°	0.176	0.05	-13.20	0.153	0.04	-14.38	200°	0.802	1.00	-0.02	0.593	0.54	-2.64
25°	0.142	0.03	-15.07	0.145	0.03	-14.90	205°	0.783	0.95	-0.22	0.603	0.56	-2.49
30°	0.129	0.03	-15.90	0.140	0.03	-15.16	210°	0.776	0.93	-0.30	0.620	0.60	-2.24
35°	0.147	0.03	-14.76	0.144	0.03	-14.94	215°	0.784	0.95	-0.22	0.644	0.64	-1.92
40°	0.195	0.06	-12.31	0.165	0.04	-13.74	220°	0.803	1.00	0.00	0.675	0.71	-1.52
45°	0.272	0.12	-9.39	0.204	0.06	-11.91	225°	0.834	1.08	0.33	0.711	0.78	-1.05
50°	0.349	0.19	-7.23	0.260	0.11	-9.78	230°	0.878	1.19	0.77	0.755	0.88	-0.54
55°	0.425	0.28	-5.52	0.335	0.17	-7.60	235°	0.926	1.33	1.23	0.805	1.00	0.02
60°	0.486	0.37	-4.36	0.423	0.28	-5.56	240°	0.962	1.44	1.57	0.852	1.13	0.51
65°	0.543	0.46	-3.40	0.501	0.39	-4.10	245°	0.986	1.51	1.78	0.893	1.24	0.92
70°	0.599	0.56	-2.55	0.582	0.52	-2.80	250°	0.999	1.55	1.89	0.927	1.33	1.25
75°	0.646	0.65	-1.90	0.649	0.65	-1.85	255°	1.000	1.55	1.90	0.955	1.41	1.50
80°	0.692	0.74	-1.30	0.714	0.79	-1.02	260°	0.999	1.55	1.89	0.976	1.48	1.69
85°	0.746	0.86	-0.65	0.764	0.90	-0.43	265°	0.992	1.53	1.83	0.991	1.52	1.82
90°	0.804	1.00	0.01	0.807	1.01	0.04	270°	0.980	1.49	1.73	0.998	1.55	1.89
95°	0.862	1.15	0.61	0.845	1.11	0.44	275°	0.962	1.43	1.57	1.000	1.55	1.90
100°	0.901	1.26	1.00	0.877	1.19	0.77	280°	0.939	1.37	1.36	1.000	1.55	1.90
105°	0.920	1.31	1.18	0.905	1.27	1.03	285°	0.910	1.28	1.08	0.999	1.55	1.90
110°	0.916	1.30	1.14	0.927	1.33	1.25	290°	0.876	1.19	0.75	0.988	1.51	1.80
115°	0.884	1.21	0.84	0.945	1.38	1.41	295°	0.836	1.08	0.35	0.963	1.44	1.57
120°	0.826	1.06	0.24	0.957	1.42	1.52	300°	0.790	0.97	-0.14	0.923	1.32	1.21
125°	0.754	0.88	-0.55	0.964	1.44	1.58	305°	0.739	0.85	-0.72	0.869	1.17	0.68
130°	0.706	0.77	-1.12	0.966	1.45	1.60	310°	0.676	0.71	-1.50	0.803	1.00	-0.01
135°	0.685	0.73	-1.38	0.966	1.45	1.60	315°	0.595	0.55	-2.61	0.740	0.85	-0.71
140°	0.691	0.74	-1.31	0.960	1.43	1.55	320°	0.508	0.40	-3.98	0.679	0.71	-1.46
145°	0.716	0.80	-0.99	0.944	1.38	1.40	325°	0.405	0.25	-5.94	0.610	0.58	-2.40
150°	0.760	0.89	-0.48	0.917	1.30	1.15	330°	0.317	0.16	-8.07	0.543	0.46	-3.40
155°	0.821	1.04	0.19	0.881	1.20	0.80	335°	0.241	0.09	-10.45	0.474	0.35	-4.57
160°	0.878	1.20	0.78	0.834	1.08	0.33	340°	0.209	0.07	-11.70	0.412	0.26	-5.80
165°	0.918	1.31	1.16	0.777	0.94	-0.28	345°	0.216	0.07	-11.40	0.351	0.19	-7.20
170°	0.940	1.37	1.36	0.721	0.81	-0.94	350°	0.236	0.09	-10.66	0.301	0.14	-8.54
175°	0.943	1.38	1.30	0.674	0.70	-1.11							

<b>Polarization:</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Maximum Field:</b>	<b>1.000 @ 252° True</b>	<b>1.000 @ 273° True</b>
<b>Minimum Field:</b>	<b>0.129 @ 30° True</b>	<b>0.140 @ 32° True</b>
<b>RMS:</b>	<b>0.726</b>	<b>0.725</b>
<b>Maximum ERP:</b>	<b>1.550 kW</b>	<b>1.550 kW</b>
<b>Maximum Power Gain:</b>	<b>1.268 (1.032 dB)</b>	<b>1.268 (1.032 dB)</b>

**Total Input Power: 1.222 kW**