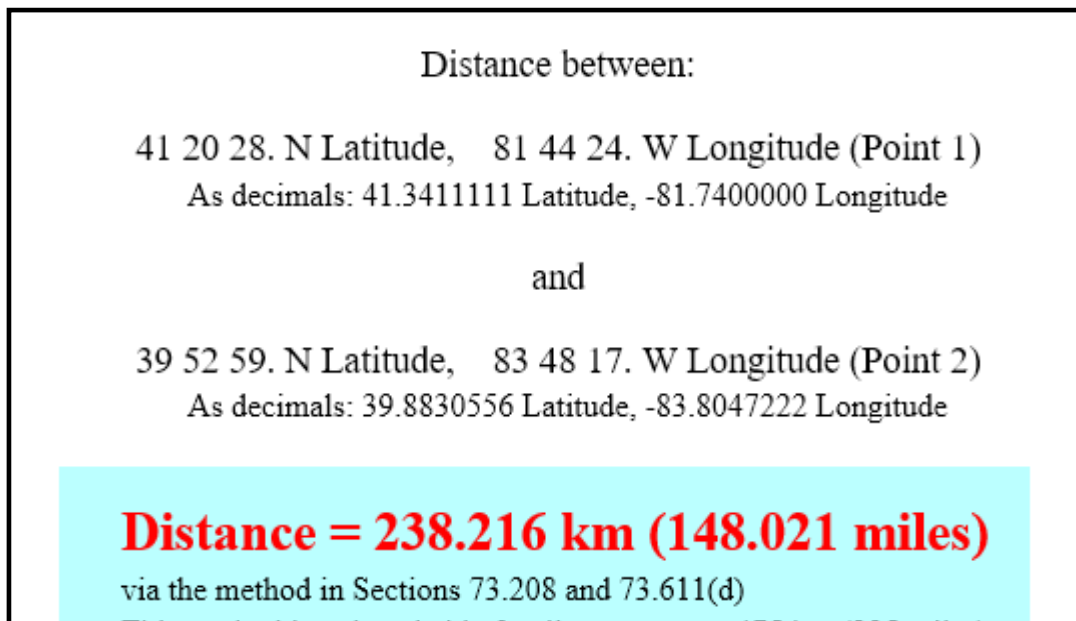


## **W233CG CP MINOR MODIFICATION**

### **“250 MILE AM WAIVER” TRANSLATOR FOR WJMO(AM) (#41389)**

This modification to the existing CP (BPFT-20170410AFP) takes advantage of the 25 mile rule change for AM translators announced in AM Revitalization 2<sup>nd</sup> Report and Order, MB Docket No. 13-249. The modified W233CG translator will continue to rebroadcast WJMO(AM) (facility ID # 41389), and is located 148.02 miles from the previous W296BO licensed facility within the required 250 miles.



#### **Allocation discussion:**

All exhibits utilize the USGS 3 second terrain database.

- E1 Channel study
- E1A Interference analysis to WQMX
- E1B Interference analysis to WHBC-FM
- E1C Aerial photographs and street views of interference area
- E1D DA
- E2 60 dBu, 34 dBu Canadian compliance and 25 mile limit
- E3 ASR

A channel study is included as E1 demonstrating compliance with §74.1204 with the exception of 2nd adjacent channel station WQMX. And WHBC-FM. A plot of the proposed 60 dBu contour is provided as E2 showing that it is entirely contained within primary station WJMO(AM)'s 2 mV/m and 40 km radius.

**Canada:**

Exhibits E2 demonstrates that the proposed facility's 34 dBu (50:10) does not cross the Canadian border and is contained within 60 km where it approaches the border.

**Waiver of §74.1235(d)(3):**

Commission staff recently indicated that a waiver of §74.1235(d)(3) is required if the proposed 34 dBu (50:10) exceeds 60 km over U.S soil even through it does not exceed 60 km at azimuths where it approaches or crosses the Canadian border. Therefore, a waive, if required, is requested.

**WQMX analysis:**

The proposed facility will be located inside the protected contour of WQMX on 235B. An interference analyses has been conducted based on the U/D ratio of +40 dB at the proposed site and is included as E1A and E1C. WQMX places a 71.55 dBu at the site and the interfering contour is 111.55 dBu which clears the ground by at least 191 meters.

**WHBC-FM analysis:**

WHBC-FM places a 55.45 dBu at the site resulting in an interference contour of 95.45 dBu (50:10) which clears the ground by at least 24.5 meters within the first 500 meters where only one and two story houses are located and 50.1 meters beyond that radius based on the elevation pattern for the PSI FML-5 75% spaced antenna. A thorough review of the area within the entire contour using *Google Street View* reveals that the tallest building is three stories.

It is clear from exhibits E1A, E1B and E1C that the interference contour will not reach any populated area or major highways. Based on this showing, a waiver of Section 74.1204 is requested in accordance with *Living Way Ministries, Inc.* (FCC 08-242).

**RF Exposure Calculation:**

The proposed facility will utilize a five bay PSI 75% wavelength spaced, circularly polarized antenna with a center of radiation at 210 meters AGL on existing tower ASR #1026082. The RF contribution of the proposed translator was calculated based on a worst case F factor of 1.0 using the formula included below to be 0.39  $\mu\text{Watts}/\text{cm}^2$  or 0.2% of the maximum permissible 200  $\mu\text{Watts}/\text{cm}^2$  for general population/uncontrolled exposure, and well below the 5% of that limit which requires consideration. The proposed translator clearly complies with Commission RF radiation limits.

$$S \text{ (RF in } \mu\text{Watts}/\text{cm}^2) = \frac{33.4 (F^2 \text{ Vertical Factor}) X (H \text{ ERP} + V \text{ ERP in Watts})}{R^2 \text{ (distance to radiation center in meters} - 2 \text{ m)}}$$

Charles M. Anderson July 17, 2017



Charles M. Anderson  
1519 Euclid Avenue  
Bowling Green, KY 42103  
270-535-4432

## E1 CHANNEL STUDY

REFERENCE  
41 20 28.0 N.  
81 44 24.0 W.

CH# 233D - 94.5 MHz, Pwr= 0.25 kW DA, HAAT= 284.8 M, COR= 557 M  
Average Protected F(50-50)= 22.0 km  
Standard Directional

DISPLAY DATES  
DATA 07-17-17  
SEARCH 07-17-17

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
233D Cleveland	W233CG	CP	DC_	0.0 0.0	0.00 BPFT20170410AFP	41 20 28.0 81 44 24.0	0.250	51.9 565	15.7 Blue Chip Broadcasting Li c	-67.4*	-67.0*
233D Cleveland	W233CG	LIC	DC_	31.1 211.2	22.36 BLFT20161116AAW	41 30 48.0 81 36 05.0	0.200	40.0 313	11.7 Blue Chip Broadcasting Li c	-40.6*	-59.5*
235B Medina	WQMX	LIC	_CX	162.8 342.9	30.06 BMLH20140625AOS	41 04 58.0 81 38 02.0	16.000 268	5.6 587	65.4 Rubber City Radio Group, I	5.8	-36.8*

See E1A and E1C for disproval of interference to WQMX per *Living Way*.

233B Port Clinton	WXKR	LIC	ZCX	278.4 97.4	128.87 BLH20080910ACQ	41 30 03.0 83 16 16.0	30.000 188	131.9 374	64.6 Cumulus Li censi ng Li c	-20.7*	1.3
231B Canton	WHBC-FM	LIC	_C_	144.2 324.5	60.59 BMLH19880406KA	40 53 53.0 81 19 07.0	45.000 157	5.8 509	64.2 Alpha Media Li censee Li c	34.7	-5.3*

See E1B and E1C for disproval of interference to WHBC-FM per *Living Way*.

233D Canton	W233CE	LIC	_C_	155.2 335.4	62.05 BLFT20160811ADO	40 50 03.0 81 25 49.0	0.210	35.6 398	9.6 Living Bread Radio, Inc.	8.2	1.3
233B Pittsburgh	WWSW-FM	LIC	_CN	123.2 304.4	175.43 BMLH19821004BH	40 27 48.0 80 00 18.0	50.000 247	154.3 558	77.9 Amfm Radi o Li censes, L. I. c	1.5	14.3
232B Chatham	AL8509	VAC	___	342.8 162.5	123.20	42 24 00.0 82 11 00.0	50.000 150	77.4 333	65.0	28.5	29.8
232B		_HN	ON	346.1 165.9	125.58	42 26 14.0 82 06 23.0	50.000 134	74.7 320	62.1	32.3	34.3

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.  
All separation margins (if shown) include rounding.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni ), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
"\*"affixed to 'IN' or 'OUT' values = site inside restricted contour.  
Reference station has protected zone issue: AM tower

# E1A WQMX ANALYSIS

W233CG Cleveland, OH

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.25

Translator or LPFM Antenna Height AG = 210 Meters

W233CG Antenna Model = PSI-5-75% SPACING

Protected Station's Contour = 71.5475 dBu

Translator's or LPFM's full Interference contour 111.5475

Review Azimuth = 0 Degrees True

Relative Field on the horizon at Review Azimuth = 1.000

Translator/LPFM ERP on the horizon at Review Azimuth = 0.25 kW

Distance between stations = 30.1 km

Protected Station= WQMX, 16 kW, 587 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.00	1.0	0.2500	293.4911	293.4911	210.000
05.00	0.836	1.0	0.1747	245.3586	244.4249	188.616
10.00	0.44	1.0	0.0484	129.1361	127.1742	187.576
15.00	0.031	1.0	0.0002	009.0982	008.7882	207.645
20.00	0.202	1.0	0.0102	059.2852	055.7099	189.723
25.00	0.208	1.0	0.0108	061.0462	055.3266	184.201
30.00	0.071	1.0	0.0013	020.8379	018.0461	199.581
35.00	0.077	1.0	0.0015	022.5988	018.5119	197.038
40.00	0.147	1.0	0.0054	043.1432	033.0496	182.268
45.00	0.126	1.0	0.0040	036.9799	026.1487	183.851
50.00	0.051	1.0	0.0007	014.9680	009.6213	198.534
55.00	0.028	1.0	0.0002	008.2178	004.7135	203.268
60.00	0.079	1.0	0.0016	023.1858	011.5929	189.921
65.00	0.095	1.0	0.0023	027.8817	011.7833	184.731
70.00	0.085	1.0	0.0018	024.9467	008.5323	186.558
75.00	0.063	1.0	0.0010	018.4899	004.7855	192.140
80.00	0.039	1.0	0.0004	011.4462	001.9876	198.728
85.00	0.018	1.0	0.0001	005.2828	000.4604	204.737
90.00	0.001	1.0	0.0000	000.2935	000.0000	209.707

## B WHBC-FM ANALYSIS

W233CG Cleveland, OH

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.25

Translator or LPFM Antenna Height AG = 210 Meters

W233CG Antenna Model = PSI-5-75% SPACING

Protected Station's Contour = 55.44694 dBu

Translator's or LPFM's full Interference contour 95.44694

Review Azimuth = 0 Degrees True

Relative Field on the horizon at Review Azimuth = 1.000

Translator/LPFM ERP on the horizon at Review Azimuth = 0.25 kW

Distance between stations = 60.6 km

Protected Station= WHBC-F, 45 kW, 509 M Meters COR AMSL

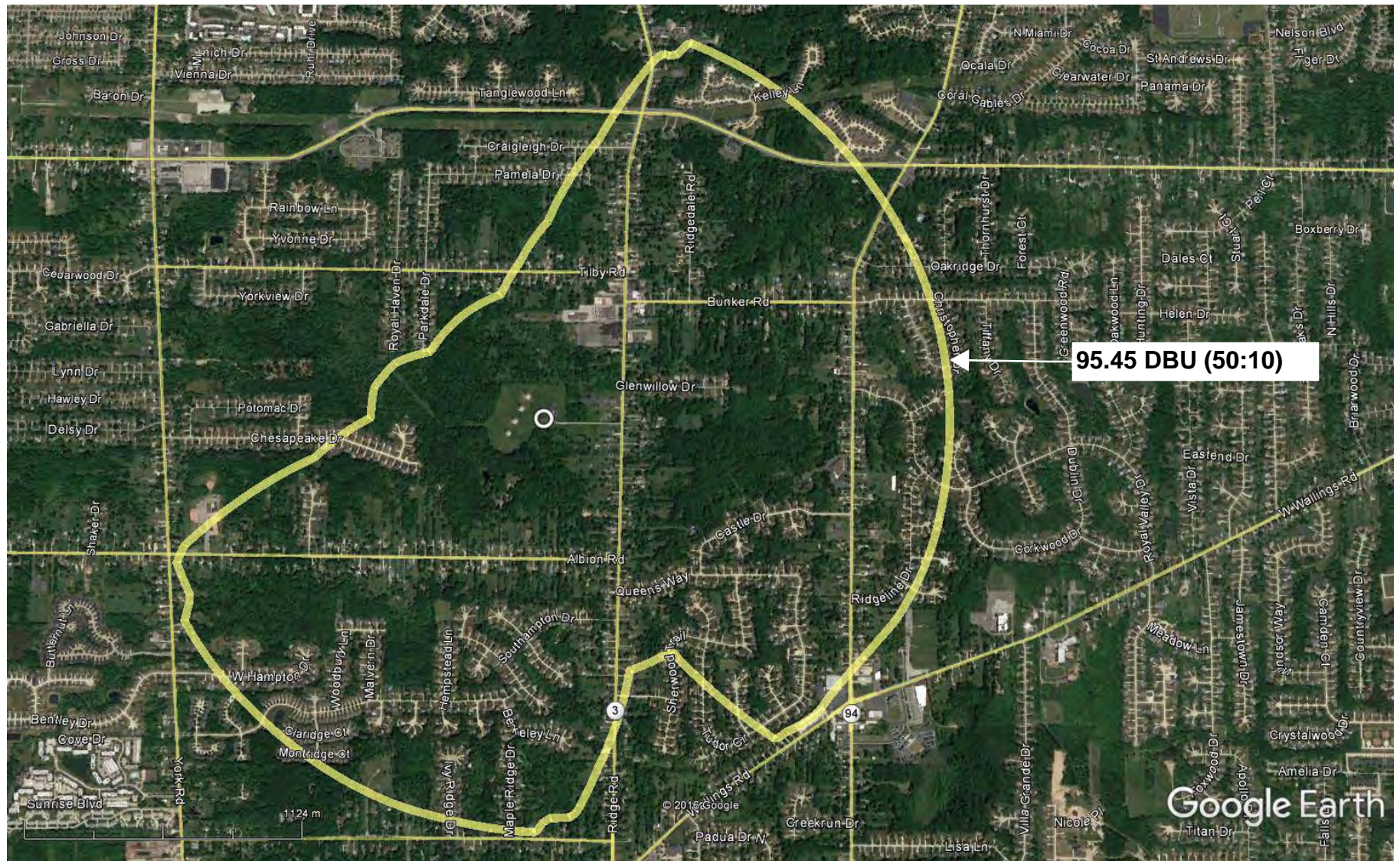
Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.00	1.0	0.2500	1873.3676	1873.3676	210.000
01.00	0.993	1.0	0.2465	1860.2540	1859.9706	177.534
02.00	0.972	1.0	0.2362	1820.9133	1819.8041	146.451
03.00	0.939	1.0	0.2204	1759.0922	1756.6814	117.936
04.00	0.893	1.0	0.1994	1672.9173	1668.8421	093.303
05.00	0.836	1.0	0.1747	1566.1354	1560.1757	073.502
06.00	0.769	1.0	0.1478	1440.6197	1432.7278	059.414
07.00	0.694	1.0	0.1204	1300.1171	1290.4262	051.556
08.00	0.613	1.0	0.0939	1148.3743	1137.1984	050.177
09.00	0.528	1.0	0.0697	989.1381	976.9602	055.265
10.00	0.44	1.0	0.0484	824.2817	811.7590	066.865
11.00	0.352	1.0	0.0310	659.4254	647.3099	084.176
12.00	0.265	1.0	0.0176	496.4424	485.5939	106.784
13.00	0.182	1.0	0.0083	340.9529	332.2143	133.302
14.00	0.103	1.0	0.0027	192.9569	187.2252	163.320
15.00	0.031	1.0	0.0002	058.0744	056.0956	194.969
16.00	0.034	1.0	0.0003	063.6945	061.2271	192.443
17.00	0.09	1.0	0.0020	168.6031	161.2359	160.705
18.00	0.137	1.0	0.0047	256.6514	244.0899	130.690
19.00	0.174	1.0	0.0076	325.9660	308.2069	103.876
20.00	0.202	1.0	0.0102	378.4203	355.5987	080.573
21.00	0.22	1.0	0.0121	412.1409	384.7666	062.302
22.00	0.229	1.0	0.0131	429.0012	397.7630	049.293
23.00	0.23	1.0	0.0132	430.8746	396.6221	041.644
24.00	0.222	1.0	0.0123	415.8876	379.9322	040.843
25.00	0.208	1.0	0.0108	389.6605	353.1523	045.322
26.00	0.188	1.0	0.0088	352.1931	316.5491	055.609
27.00	0.163	1.0	0.0066	305.3589	272.0768	071.370
28.00	0.135	1.0	0.0046	252.9046	223.3015	091.268
29.00	0.104	1.0	0.0027	194.8302	170.4024	115.544
30.00	0.071	1.0	0.0013	133.0091	115.1893	143.495
31.00	0.039	1.0	0.0004	073.0613	062.6258	172.371
32.00	0.007	1.0	0.0000	013.1136	011.1209	203.051
33.00	0.023	1.0	0.0001	043.0875	036.1362	186.533
34.00	0.052	1.0	0.0007	097.4151	080.7608	155.526
35.00	0.077	1.0	0.0015	144.2493	118.1621	127.262
36.00	0.099	1.0	0.0025	185.4634	150.0430	100.987
37.00	0.117	1.0	0.0034	219.1840	175.0481	078.092
38.00	0.131	1.0	0.0043	245.4112	193.3866	058.910
39.00	0.141	1.0	0.0050	264.1448	205.2791	043.768
40.00	0.147	1.0	0.0054	275.3850	210.9572	032.986
41.00	0.15	1.0	0.0056	281.0052	212.0773	025.644

## E1B WHBC-FM ANALYSIS

42.00	0.148	1.0	0.0055	277.2584	206.0432	024.478
43.00	0.144	1.0	0.0052	269.7649	197.2936	026.021
44.00	0.136	1.0	0.0046	254.7780	183.2720	033.016
45.00	0.126	1.0	0.0040	236.0443	166.9085	043.091
46.00	0.114	1.0	0.0032	213.5639	148.3540	056.375
47.00	0.1	1.0	0.0025	187.3368	127.7634	072.991
48.00	0.084	1.0	0.0018	157.3629	105.2963	093.057
49.00	0.068	1.0	0.0012	127.3890	083.5747	113.858
50.00	0.051	1.0	0.0007	095.5417	061.4131	136.811
51.00	0.034	1.0	0.0003	063.6945	040.0842	160.500
52.00	0.018	1.0	0.0001	033.7206	020.7605	183.428
53.00	0.002	1.0	0.0000	003.7467	002.2548	207.008
54.00	0.013	1.0	0.0000	024.3538	014.3148	190.297
55.00	0.028	1.0	0.0002	052.4543	030.0865	167.032
56.00	0.041	1.0	0.0004	076.8081	042.9505	146.323
57.00	0.052	1.0	0.0007	097.4151	053.0561	128.301
58.00	0.063	1.0	0.0010	118.0222	062.5422	109.912
59.00	0.072	1.0	0.0013	134.8825	069.4696	094.383
60.00	0.079	1.0	0.0016	147.9960	073.9980	081.832
61.00	0.085	1.0	0.0018	159.2362	077.1993	070.729
62.00	0.089	1.0	0.0020	166.7297	078.2749	062.786
63.00	0.092	1.0	0.0021	172.3498	078.2452	056.435
64.00	0.094	1.0	0.0022	176.0965	077.1956	051.725
65.00	0.095	1.0	0.0023	177.9699	075.2133	048.704
66.00	0.095	1.0	0.0023	177.9699	072.3869	047.416
67.00	0.093	1.0	0.0022	174.2232	068.0744	049.627
68.00	0.091	1.0	0.0021	170.4764	063.8616	051.937
69.00	0.089	1.0	0.0020	166.7297	059.7506	054.344
70.00	0.085	1.0	0.0018	159.2362	054.4620	060.367
71.00	0.081	1.0	0.0016	151.7428	049.4026	066.524
72.00	0.077	1.0	0.0015	144.2493	044.5755	072.811
73.00	0.073	1.0	0.0013	136.7558	039.9835	079.220
74.00	0.068	1.0	0.0012	127.3890	035.1132	087.546
75.00	0.063	1.0	0.0010	118.0222	030.5464	095.999
76.00	0.058	1.0	0.0008	108.6553	026.2861	104.572
77.00	0.053	1.0	0.0007	099.2885	022.3350	113.256
78.00	0.048	1.0	0.0006	089.9216	018.6958	122.043
79.00	0.043	1.0	0.0005	080.5548	015.3706	130.925
80.00	0.039	1.0	0.0004	073.0613	012.6870	138.049
81.00	0.034	1.0	0.0003	063.6945	009.9640	147.090
82.00	0.03	1.0	0.0002	056.2010	007.8217	154.346
83.00	0.026	1.0	0.0002	048.7076	005.9360	161.656
84.00	0.022	1.0	0.0001	041.2141	004.3080	169.012
85.00	0.018	1.0	0.0001	033.7206	002.9389	176.408
86.00	0.014	1.0	0.0000	026.2271	001.8295	183.837
87.00	0.01	1.0	0.0000	018.7337	000.9804	191.292
88.00	0.007	1.0	0.0000	013.1136	000.4577	196.894
89.00	0.003	1.0	0.0000	005.6201	000.0981	204.381
90.00	0.001	1.0	0.0000	001.8734	000.0000	208.127



## E1C AERIAL VIEW OF 95.45 DBU (50:10) INTERFERENCE CONTOUR





## E1C STREET VIEW OF TALLEST BUILDING WITHIN 95.64 DBU INTERFERENCE CONTOUR



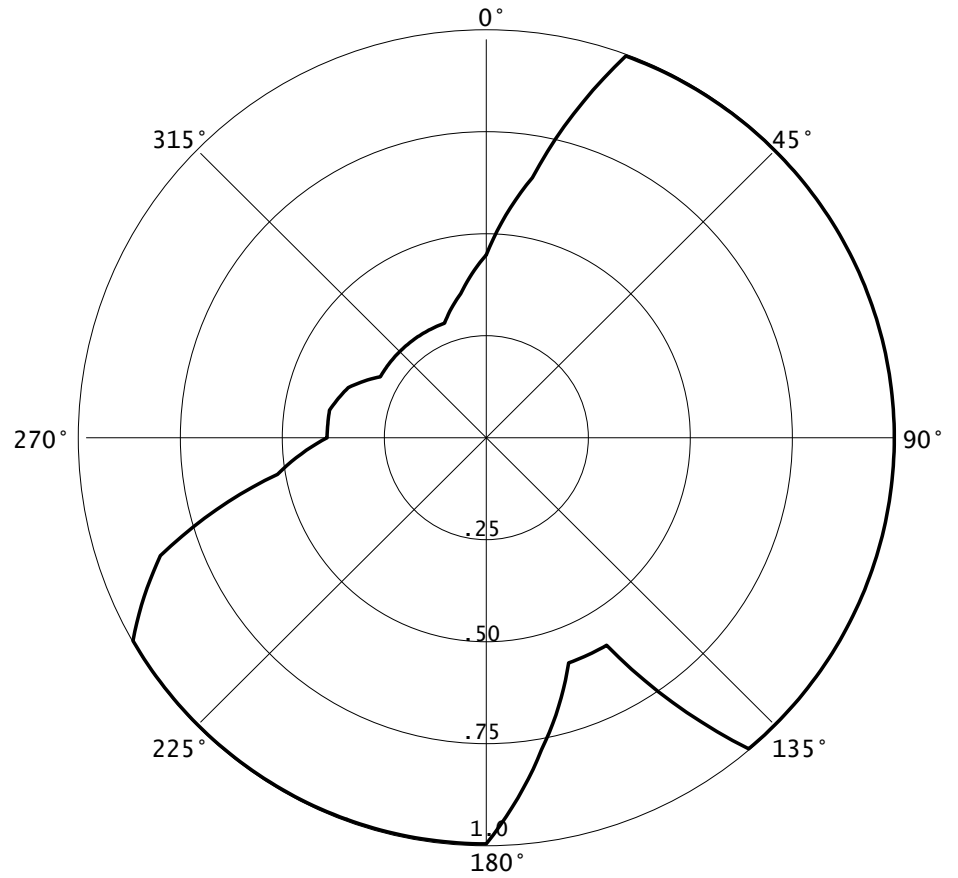
# E1D DA TABULATION

04-10-2017

RMS(V)= .814

Graph is Relative Field

Azi	Field	dBk	kw
000	0.450	-12.956	0.051
010	0.650	-09.762	0.106
020	1.000	-06.021	0.250
030	1.000	-06.021	0.250
040	1.000	-06.021	0.250
050	1.000	-06.021	0.250
060	1.000	-06.021	0.250
070	1.000	-06.021	0.250
080	1.000	-06.021	0.250
090	1.000	-06.021	0.250
100	1.000	-06.021	0.250
110	1.000	-06.021	0.250
120	1.000	-06.021	0.250
130	1.000	-06.021	0.250
140	1.000	-06.021	0.250
150	0.590	-10.604	0.087
160	0.590	-10.604	0.087
170	0.780	-08.179	0.152
180	1.000	-06.021	0.250
190	1.000	-06.021	0.250
200	1.000	-06.021	0.250
210	1.000	-06.021	0.250
220	1.000	-06.021	0.250
230	1.000	-06.021	0.250
240	1.000	-06.021	0.250
250	0.850	-07.432	0.181
260	0.520	-11.701	0.068
270	0.390	-14.199	0.038
280	0.390	-14.199	0.038
290	0.360	-14.895	0.032
300	0.300	-16.478	0.023
310	0.300	-16.478	0.023
320	0.300	-16.478	0.023
330	0.300	-16.478	0.023
340	0.300	-16.478	0.023
350	0.360	-14.895	0.032



Vertical elevation tabulation appended to this report.

## E2 CONTOURS

US-CANADA BORDER

34 DBU (50:10)

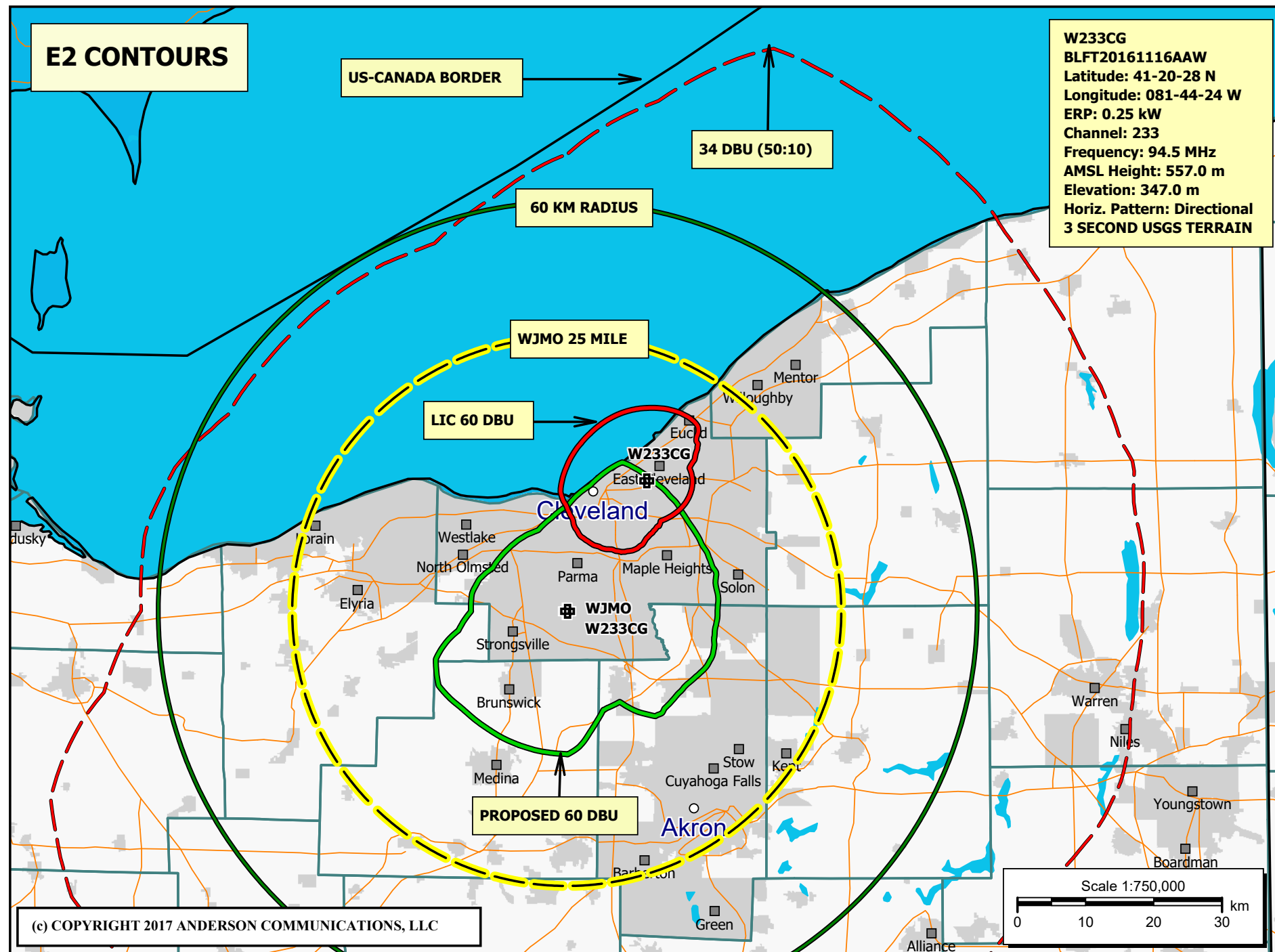
60 KM RADIUS

WJMO 25 MILE

LIC 60 DBU

PROPOSED 60 DBU

**W233CG**  
BLFT20161116AAW  
Latitude: 41-20-28 N  
Longitude: 081-44-24 W  
ERP: 0.25 kW  
Channel: 233  
Frequency: 94.5 MHz  
AMSL Height: 557.0 m  
Elevation: 347.0 m  
Horiz. Pattern: Directional  
3 SECOND USGS TERRAIN



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**Registration 1026082** [Map Registration](#)**E3 TOWER REGISTRATION****Registration Detail**

Reg Number	1026082	Status	Constructed
File Number	A1042052	Constructed	08/14/2000
EMI	No	Dismantled	
NEPA	No		

**Antenna Structure**

Structure Type TOWER - Free standing or Guyed Structure used for Commu

**Location** (in NAD83 Coordinates)

Lat/Long	41-20-28.2 N 081-44-23.9 W	Address	9466 RIDGE ROAD
City, State	NORTH ROYALTON , OH		
Zip	44133	County	CUYAHOGA
Center of AM Array		Position of Tower in Array	

**Heights (meters)**

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
346.6	251.8
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
598.4	231.0

**Painting and Lighting Specifications**

FCC Paragraphs 1, 3, 6, 15, 21

**FAA Notification**

FAA Study	02-AGL-2151-OE	FAA Issue Date	05/01/2002
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**Owner & Contact Information**

FRN	0003616588	Owner Entity Type	Corporation
Assignor FRN	0003183183	Assignor ID	L00028876

**Owner**

CBS Radio Stations Inc.  
1725 DeSales Street NW  
Suite 501  
Washington , DC 20036

P: (202)457-4505  
F:  
E: elnass@cbs.com

**Contact**

Nass , Edwin  
1725 DeSales Street NW  
Suite 501  
Washington , DC 20036

P: (202)457-4602  
F:  
E: elnass@cbs.com


**Last Action Status**

Status	Constructed	Received	07/13/2016
Purpose	Change Owner	Entered	07/13/2016
Mode	Interactive		

# Output from NADCON for station W233CG

North American Datum Conversion

NAD 83 to NAD 27

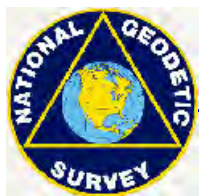
NADCON Program Version 2.11

=====

Transformation #: 1      Region: Conus

	Latitude	Longitude
NAD 27 datum values:	41 20 28.00998	81 44 24.42920
NAD 83 datum values:	41 20 28.20000	81 44 23.90000
NAD 27 - NAD 83 shift values:	-0.19002	0.52920(secs.)
	-5.862	12.304 (meters)
Magnitude of total shift:		13.629(meters)

**N 41-20-28 W 81-44-24 NAD 27 ROUNDED**



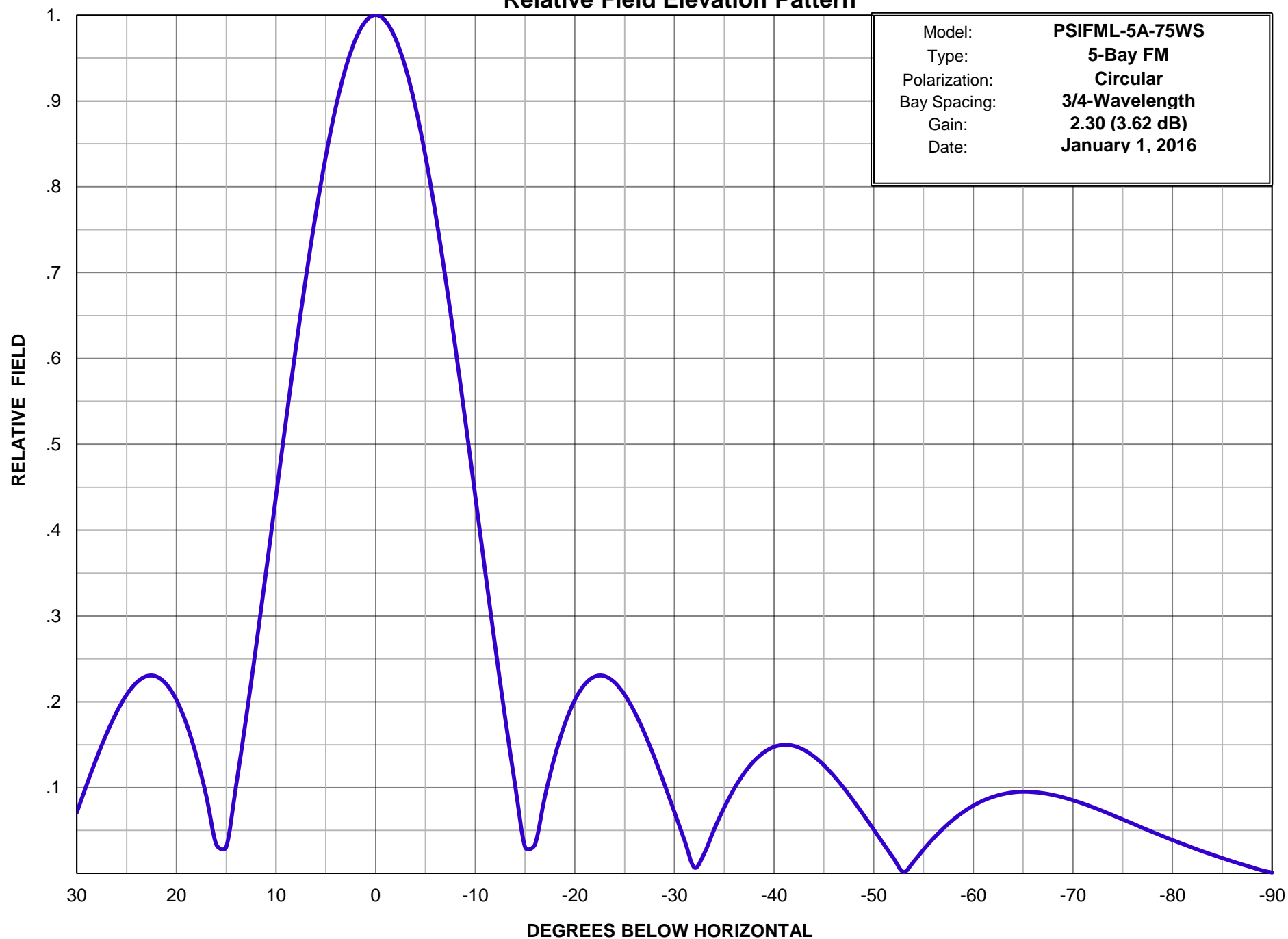
[NGS HOME PAGE](https://www.ngs.noaa.gov/cgi-bin/nadcon.prl)





**Propagation Systems, Inc.**

### Relative Field Elevation Pattern





# Propagation Systems Inc.

Elevation Pattern Tabulation

Antenna: PSIFML-5A-75WS

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-90.0	0.001	-60.000	-50.0	0.051	-25.838	-10.0	0.440	-7.134
-89.0	0.003	-49.156	-49.0	0.068	-23.365	-9.0	0.528	-5.552
-88.0	0.007	-43.136	-48.0	0.084	-21.505	-8.0	0.613	-4.248
-87.0	0.010	-39.614	-47.0	0.100	-20.040	-7.0	0.694	-3.170
-86.0	0.014	-37.021	-46.0	0.114	-18.890	-6.0	0.769	-2.280
-85.0	0.018	-34.953	-45.0	0.126	-17.988	-5.0	0.836	-1.558
-84.0	0.022	-33.224	-44.0	0.136	-17.316	-4.0	0.893	-0.984
-83.0	0.026	-31.782	-43.0	0.144	-16.846	-3.0	0.939	-0.549
-82.0	0.030	-30.458	-42.0	0.148	-16.566	-2.0	0.972	-0.243
-81.0	0.034	-29.270	-41.0	0.150	-16.487	-1.0	0.993	-0.061
-80.0	0.039	-28.226	-40.0	0.147	-16.629	0.0	1.000	0.000
-79.0	0.043	-27.233	-39.0	0.141	-17.003	1.0	0.993	-0.061
-78.0	0.048	-26.342	-38.0	0.131	-17.651	2.0	0.972	-0.243
-77.0	0.053	-25.510	-37.0	0.117	-18.650	3.0	0.939	-0.549
-76.0	0.058	-24.727	-36.0	0.099	-20.106	4.0	0.893	-0.984
-75.0	0.063	-24.030	-35.0	0.077	-22.291	5.0	0.836	-1.557
-74.0	0.068	-23.385	-34.0	0.052	-25.736	6.0	0.769	-2.280
-73.0	0.073	-22.784	-33.0	0.023	-32.584	7.0	0.694	-3.168
-72.0	0.077	-22.257	-32.0	0.007	-43.327	8.0	0.613	-4.246
-71.0	0.081	-21.791	-31.0	0.039	-28.226	9.0	0.528	-5.549
-70.0	0.085	-21.396	-30.0	0.071	-22.930	10.0	0.440	-7.131
-69.0	0.089	-21.048	-29.0	0.104	-19.690	11.0	0.352	-9.074
-68.0	0.091	-20.785	-28.0	0.135	-17.413	12.0	0.265	-11.535
-67.0	0.093	-20.585	-27.0	0.163	-15.747	13.0	0.182	-14.822
-66.0	0.095	-20.473	-26.0	0.188	-14.515	14.0	0.103	-19.741
-65.0	0.095	-20.432	-25.0	0.208	-13.631	15.0	0.031	-30.241
-64.0	0.094	-20.501	-24.0	0.222	-13.056	16.0	0.034	-29.464
-63.0	0.092	-20.684	-23.0	0.230	-12.771	17.0	0.090	-20.930
-62.0	0.089	-20.989	-22.0	0.229	-12.788	18.0	0.137	-17.277
-61.0	0.085	-21.427	-21.0	0.220	-13.140	19.0	0.174	-15.169
-60.0	0.079	-22.054	-20.0	0.202	-13.888	20.0	0.202	-13.888
-59.0	0.072	-22.912	-19.0	0.174	-15.169	21.0	0.220	-13.140
-58.0	0.063	-24.051	-18.0	0.137	-17.268	22.0	0.229	-12.788
-57.0	0.052	-25.609	-17.0	0.090	-20.915	23.0	0.230	-12.771
-56.0	0.041	-27.796	-16.0	0.034	-29.425	24.0	0.222	-13.056
-55.0	0.028	-31.142	-15.0	0.031	-30.241	25.0	0.208	-13.631
-54.0	0.013	-37.403	-14.0	0.103	-19.753	26.0	0.188	-14.515
-53.0	0.002	-55.563	-13.0	0.182	-14.822	27.0	0.163	-15.747
-52.0	0.018	-35.102	-12.0	0.265	-11.540	28.0	0.135	-17.413
-51.0	0.034	-29.309	-11.0	0.352	-9.077	29.0	0.104	-19.690