

**ENGINEERING STATEMENT  
FCC APPLICATION  
Prepared For DuPage Radio, LLC  
W272DQ(FM)(WCKG) Elmhurst, Illinois  
Facility ID 151530 102.3 FM .250 kW  
FCC Form 349-Instant Application**

- 1) Statement-Nature Of Proposal
- 2) Exhibit 1 – W272DQ License Vs.  
Proposed 60 dBu Contour Overlap
- 3) Exhibit 2 – W272DQ 60 dBu And  
WCKG 2.0 mV/m Overlap(Primary  
Station)
- 4) Exhibit 3 – W272DQ 40 dbu(50,10)  
and Co Channels WXLC WYOT and  
WYCA 60 dBu Contours
- 5) Exhibit 3A – W272DQ 40 dBu(50,10)  
And Co-Channel WXLC 60 dBu  
expanded View
- 6) Exhibit 4 – Bext 2-Bay TFC1K  
Antenna Pattern

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**Nature Of Proposal**

DuPage Radio, LLC("Dupage Radio") is the licensee of Translator Station W272DQ, 102.3 FM, Elmhurst, Illinois (Facility Id 151530) W272DQ is a licensed Class D FM station with authority to operate .090 kW with a non directional facility (File number: 0000200801). WCKG AM 1530-Elmhurst is the Primary station(BL-19960524AA).

DuPage Radio herein proposes a minor change to the W272DQ, 102.3 Mhz. The instant application proposes to utilize a different antenna as the current (File number: 0000200801). DuPage is requesting a change to the Bext 2 Bay TFC1K Directional Vertical/Horizontal(Circular) Polarized Antenna. Utilizing a new elevation of 257 feet(78.33 Meters) The same antenna Coordinates as the current License(File number: 0000200801).

In this Proposed instant application DuPage Radio Requests operation at .250 kW power ERP.

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**W272DQ Proposed**

**Coordinates:**

41-50-33 N

88-00-09 W

**Structure Elevation**

81.38 (Meters)

267 (Feet)

**Height of Radiation Center Above Ground**

78.33(meters)

257(Feet)

**Height of Radiation Center Above Mean  
Sea Level**

307.23(meters)

1008 (Feet)

**Antenna**

Directional Antenna

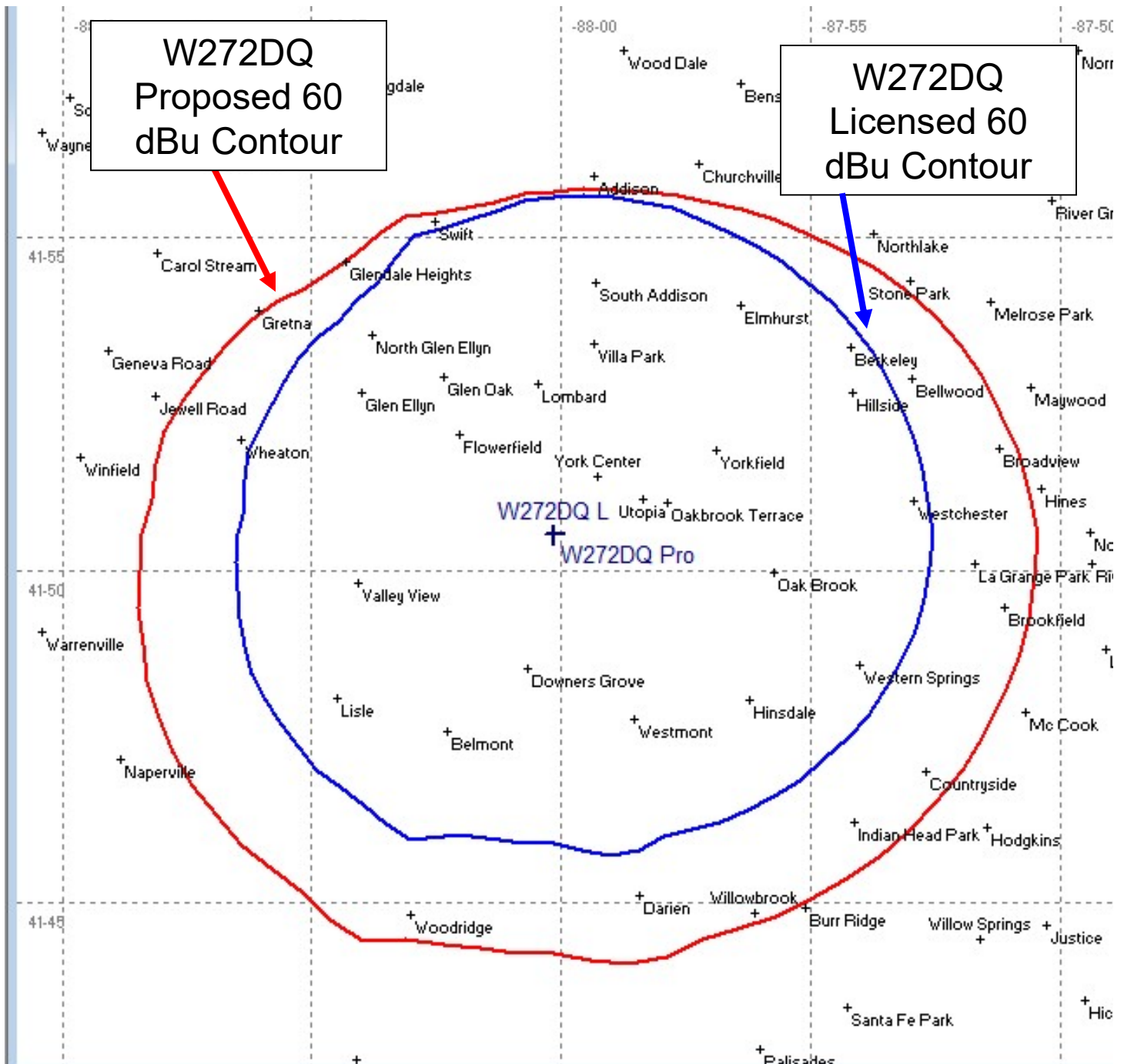
Bext 2-Bay TFC1K

**Power:**

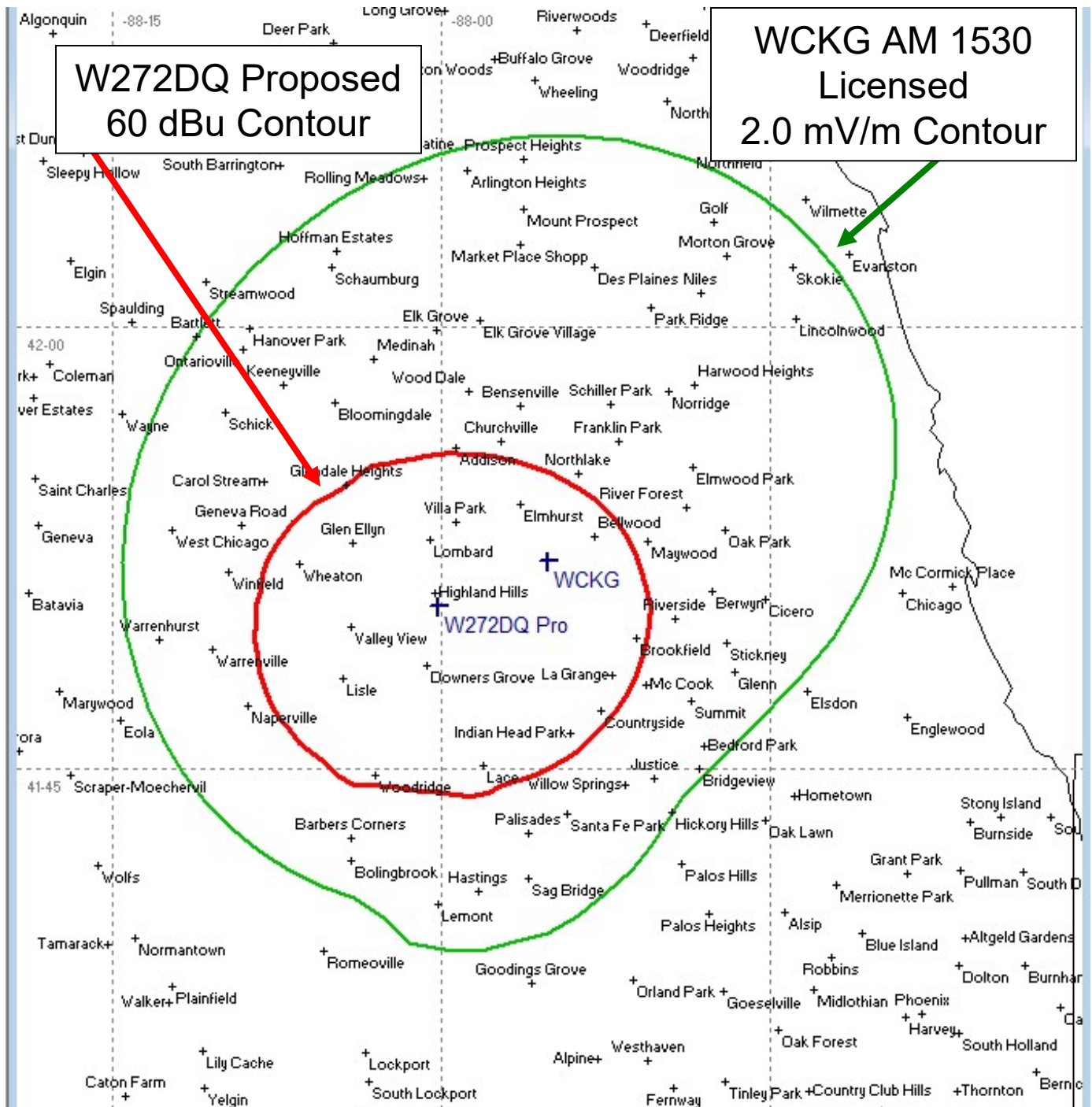
250 Watts ERP

**ENGINEERING EXHIBIT 1**  
**FCC APPLICATION**  
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60 DBu Overlaps - License Vs. Proposed

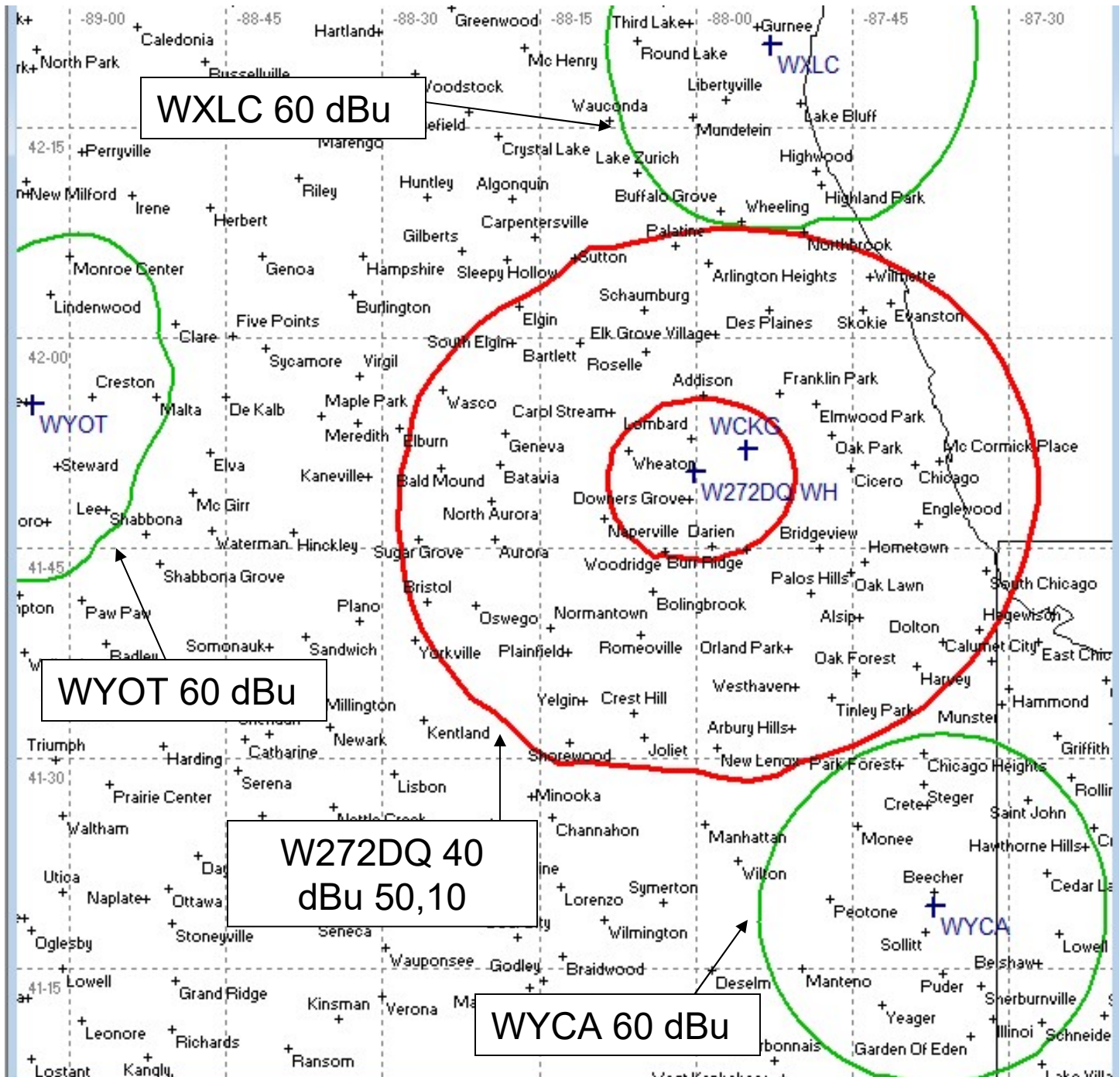


60 DBu W272DQ FM 102.3 - 2.0 mV/m WCKG AM 1530(Primary Station)



**ENGINEERING EXHIBIT 3**  
**FCC APPLICATION**  
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**Facility ID 151530 102.3 FM .250 kW**  
**FCC Form 349**

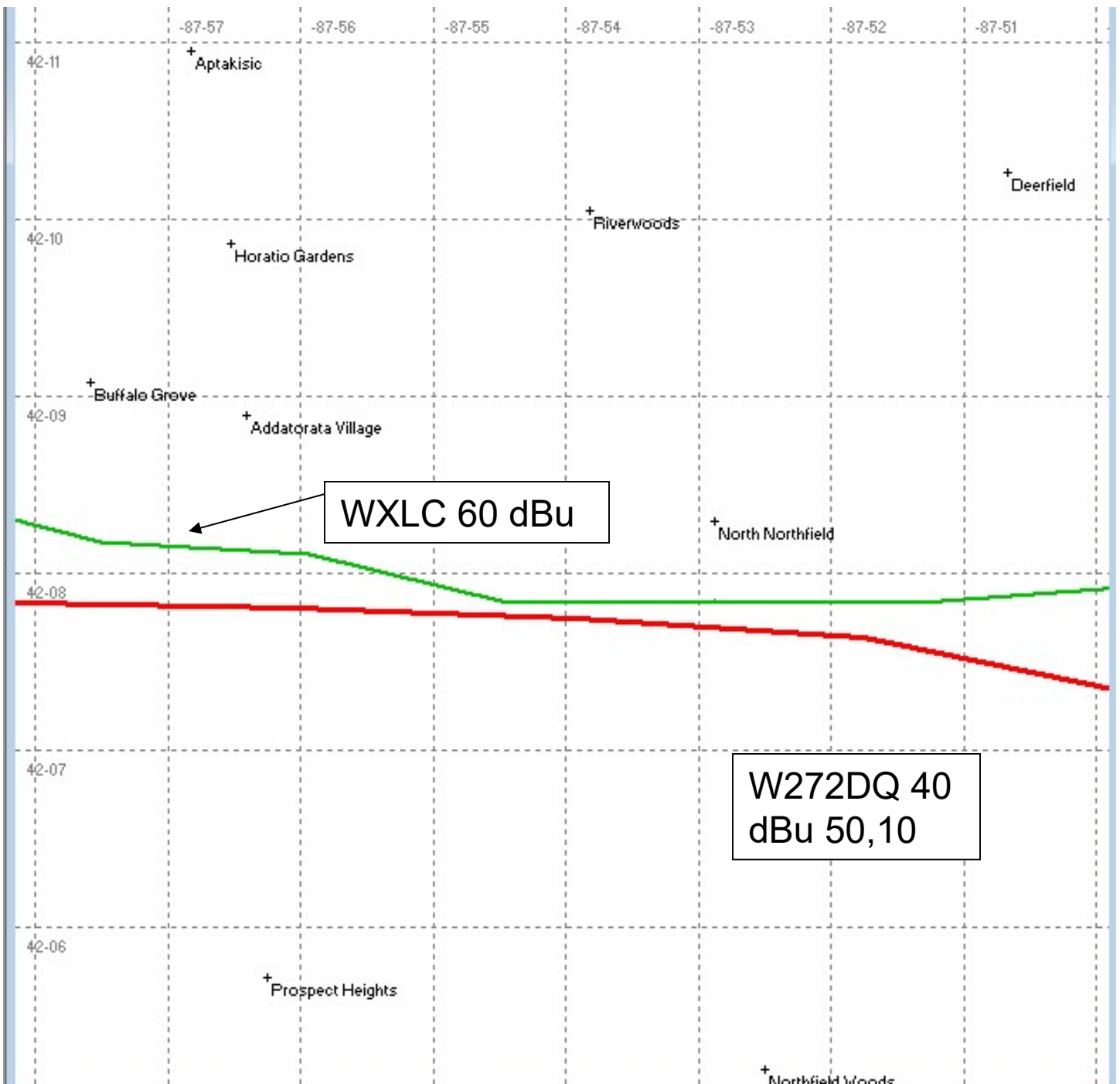
**Co Channel Study**  
**WXLC, WYOT, WYCA**





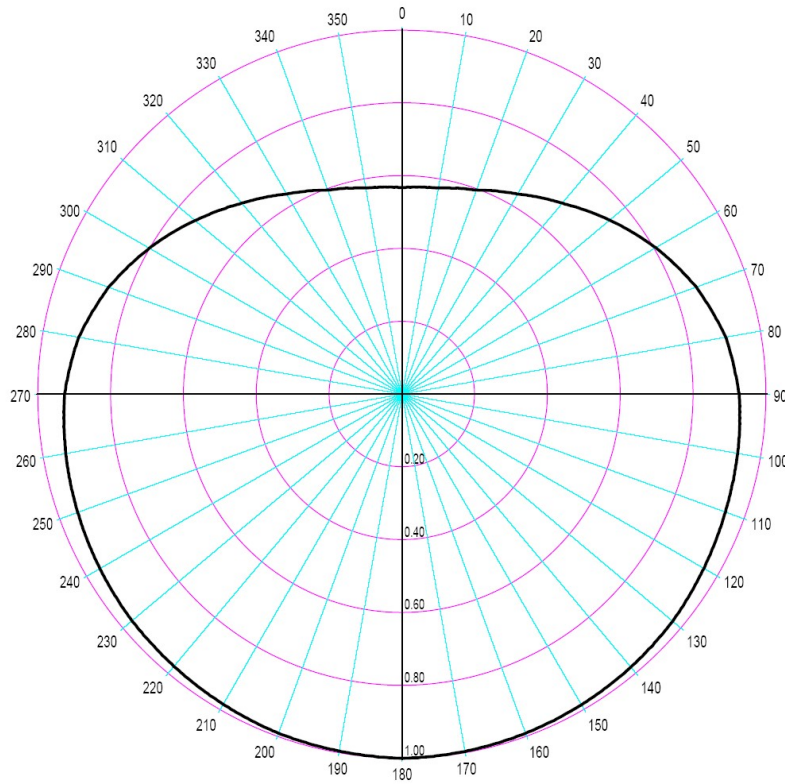
**ENGINEERING EXHIBIT 3A**  
**FCC APPLICATION**  
**Prepared For Dupage Radio, LLC**  
**W272DQ(FM)(WCKG) Elmhurst, Illinois**  
**Facility ID 151530 102.3 FM .250 kW**  
**FCC Form 349**

**Co Channel Study**  
**WXLC Expanded View**



**ENGINEERING EXHIBIT 4**  
**FCC APPLICATION**  
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**Bext TFC1K Antenna Pattern**  
**W272DQ Frequency 102.3 MHz**  
**-.36 Db Gain-Vertical/Horizontal - Circular Polarized**



Azim	Rel.FS	ERP [W]	dBk	Azim	Rel.FS	ERP [W]	dBk	Azim	Rel.FS	ERP [W]	dBk	Azim	Rel.FS	ERP [W]	dBk
0.0	0.568	80.666	-10.933	90.0	0.926	214.396	-6.688	180.0	1.000	250.032	-6.020	270.0	0.927	214.860	-6.678
5.0	0.571	81.521	-10.887	95.0	0.931	216.718	-6.641	185.0	0.997	248.534	-6.046	275.0	0.914	208.876	-6.801
10.0	0.575	82.667	-10.827	100.0	0.936	219.052	-6.595	190.0	0.995	247.538	-6.064	280.0	0.902	203.427	-6.916
15.0	0.586	85.860	-10.662	105.0	0.940	220.928	-6.557	195.0	0.993	246.544	-6.081	285.0	0.880	193.625	-7.130
20.0	0.597	89.114	-10.501	110.0	0.945	223.285	-6.511	200.0	0.991	245.551	-6.099	290.0	0.858	184.064	-7.350
25.0	0.616	94.876	-10.228	115.0	0.951	226.129	-6.456	205.0	0.987	243.573	-6.134	295.0	0.830	172.247	-7.638
30.0	0.635	100.819	-9.965	120.0	0.957	228.991	-6.402	210.0	0.983	241.603	-6.169	300.0	0.802	160.821	-7.937
35.0	0.660	108.914	-9.629	125.0	0.963	231.872	-6.348	215.0	0.979	239.641	-6.204	305.0	0.772	149.015	-8.268
40.0	0.685	117.321	-9.306	130.0	0.970	235.255	-6.285	220.0	0.975	237.686	-6.240	310.0	0.742	137.659	-8.612
45.0	0.714	127.465	-8.946	135.0	0.974	237.199	-6.249	225.0	0.971	235.740	-6.276	315.0	0.713	127.108	-8.958
50.0	0.744	138.402	-8.589	140.0	0.978	239.151	-6.213	230.0	0.968	234.286	-6.303	320.0	0.685	117.321	-9.306
55.0	0.774	149.788	-8.245	145.0	0.981	240.621	-6.187	235.0	0.963	231.872	-6.348	325.0	0.660	108.914	-9.629
60.0	0.805	162.027	-7.904	150.0	0.985	242.587	-6.151	240.0	0.958	229.470	-6.393	330.0	0.635	100.819	-9.965
65.0	0.832	173.078	-7.618	155.0	0.988	244.067	-6.125	245.0	0.953	227.081	-6.438	335.0	0.616	94.876	-10.228
70.0	0.860	184.924	-7.330	160.0	0.991	245.551	-6.099	250.0	0.948	224.705	-6.484	340.0	0.597	89.114	-10.501
75.0	0.881	194.065	-7.121	165.0	0.993	246.544	-6.081	255.0	0.943	222.341	-6.530	345.0	0.586	85.860	-10.662
80.0	0.903	203.878	-6.906	170.0	0.996	248.036	-6.055	260.0	0.938	219.989	-6.576	350.0	0.575	82.667	-10.827
85.0	0.914	208.876	-6.801	175.0	0.998	249.033	-6.037	265.0	0.932	217.184	-6.632	355.0	0.571	81.521	-10.887