

# FMOver Analysis

## WOUF - WATZ

09-17-2014

Terrain Data: USGS 03

WOUF

Channel = 257C2  
Max ERP = 32 kW  
RCAMSL = 478 M  
N. Lat. 44 32 44.0  
W. Lng. 85 49 09.0  
Protected  
60 dBu

WATZ-FM BLH19890818KB  
(^ Max Class Parameters)  
Channel = 257C2  
Max ERP = 50 kW  
RCAMSL = 388 M  
N. Lat. 44 51 25.0  
W. Lng. 83 32 34.0  
Interfering  
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
018.0	032.0000	0221.1	055.1	277.0	050.0000	0141.5	163.6	35.27	
019.0	032.0000	0220.7	055.0	276.9	050.0000	0141.5	162.6	35.44	
020.0	032.0000	0220.3	055.0	276.8	050.0000	0141.5	161.7	35.60	
021.0	032.0000	0220.1	055.0	276.7	050.0000	0141.5	160.8	35.77	
022.0	032.0000	0220.3	055.0	276.6	050.0000	0141.4	159.8	35.93	
023.0	032.0000	0220.7	055.0	276.5	050.0000	0141.4	158.9	36.09	
024.0	032.0000	0221.0	055.1	276.4	050.0000	0141.4	158.0	36.25	
025.0	032.0000	0220.7	055.0	276.3	050.0000	0141.3	157.1	36.39	
026.0	032.0000	0220.2	055.0	276.1	050.0000	0141.3	156.2	36.54	
027.0	032.0000	0220.0	055.0	276.0	050.0000	0141.2	155.3	36.68	
028.0	032.0000	0219.8	055.0	275.9	050.0000	0141.1	154.5	36.82	
029.0	032.0000	0219.6	055.0	275.7	050.0000	0141.0	153.6	36.95	
030.0	032.0000	0219.3	054.9	275.5	050.0000	0140.9	152.7	37.09	
031.0	032.0000	0218.7	054.9	275.4	050.0000	0140.8	151.9	37.22	
032.0	032.0000	0218.2	054.8	275.2	050.0000	0140.8	151.1	37.35	
033.0	032.0000	0217.4	054.8	275.0	050.0000	0140.7	150.3	37.48	
034.0	032.0000	0216.3	054.7	274.8	050.0000	0140.7	149.5	37.60	
035.0	032.0000	0215.0	054.6	274.5	050.0000	0140.7	148.7	37.73	
036.0	032.0000	0214.0	054.5	274.3	050.0000	0140.7	148.0	37.85	
037.0	032.0000	0213.4	054.4	274.1	050.0000	0140.7	147.2	37.98	
038.0	032.0000	0212.9	054.4	273.9	050.0000	0140.8	146.4	38.12	
039.0	032.0000	0212.2	054.3	273.6	050.0000	0141.0	145.7	38.25	
040.0	032.0000	0210.7	054.2	273.3	050.0000	0141.1	145.0	38.37	
041.0	032.0000	0208.6	054.0	273.1	050.0000	0141.3	144.4	38.49	
042.0	032.0000	0205.7	053.8	272.7	050.0000	0141.4	143.8	38.60	
043.0	032.0000	0201.9	053.5	272.4	050.0000	0141.4	143.3	38.69	
044.0	032.0000	0197.1	053.1	272.0	050.0000	0141.3	142.9	38.76	
045.0	032.0000	0192.2	052.7	271.6	050.0000	0141.3	142.6	38.83	
046.0	032.0000	0188.1	052.3	271.3	050.0000	0141.3	142.2	38.90	
047.0	032.0000	0183.8	052.0	270.9	050.0000	0141.4	141.8	38.98	
048.0	032.0000	0179.6	051.6	270.5	050.0000	0141.8	141.5	39.05	
049.0	032.0000	0176.6	051.3	270.2	050.0000	0142.2	141.1	39.13	
050.0	032.0000	0173.2	051.0	269.8	050.0000	0142.6	140.8	39.20	
051.0	032.0000	0169.8	050.6	269.4	050.0000	0143.2	140.6	39.26	
052.0	032.0000	0166.3	050.2	269.1	050.0000	0143.8	140.4	39.32	
053.0	032.0000	0162.8	049.8	268.7	050.0000	0144.3	140.2	39.36	
054.0	032.0000	0159.8	049.5	268.3	050.0000	0144.6	140.0	39.41	

055.0	032.0000	0157.5	049.2	267.9	050.0000	0145.0	139.8	39.46
056.0	032.0000	0155.8	049.0	267.6	050.0000	0145.1	139.6	39.51
057.0	032.0000	0154.3	048.8	267.2	050.0000	0145.2	139.3	39.56
058.0	032.0000	0152.1	048.5	266.9	050.0000	0145.0	139.2	39.58
059.0	032.0000	0149.8	048.2	266.5	050.0000	0144.8	139.1	39.60
060.0	032.0000	0148.1	047.9	266.2	050.0000	0144.6	138.9	39.62
061.0	032.0000	0144.8	047.5	265.8	050.0000	0144.4	139.0	39.60
062.0	032.0000	0142.6	047.2	265.4	050.0000	0144.2	139.0	39.60
063.0	032.0000	0141.7	047.0	265.1	050.0000	0144.0	138.8	39.63
064.0	032.0000	0141.0	047.0	264.7	050.0000	0143.8	138.6	39.66
065.0	032.0000	0140.8	046.9	264.4	050.0000	0143.3	138.3	39.69
066.0	032.0000	0141.2	047.0	264.1	050.0000	0142.6	138.0	39.74
067.0	032.0000	0141.3	047.0	263.8	050.0000	0142.1	137.8	39.77
068.0	032.0000	0141.2	047.0	263.4	050.0000	0141.6	137.6	39.79
069.0	032.0000	0140.9	046.9	263.1	050.0000	0141.1	137.5	39.81
070.0	032.0000	0139.5	046.7	262.7	050.0000	0140.4	137.5	39.78
071.0	032.0000	0138.6	046.6	262.4	050.0000	0139.8	137.5	39.77
072.0	032.0000	0138.8	046.6	262.1	050.0000	0139.4	137.3	39.79
073.0	032.0000	0139.0	046.7	261.7	050.0000	0139.2	137.2	39.82
074.0	032.0000	0140.6	046.9	261.4	050.0000	0139.1	136.9	39.87
075.0	032.0000	0141.4	047.0	261.0	050.0000	0139.0	136.7	39.91
076.0	032.0000	0141.4	047.0	260.7	050.0000	0138.9	136.6	39.92
077.0	032.0000	0140.7	046.9	260.4	050.0000	0138.6	136.7	39.89
078.0	032.0000	0139.6	046.8	260.0	050.0000	0138.0	136.8	39.85
079.0	032.0000	0138.4	046.6	259.7	050.0000	0137.3	137.0	39.80
080.0	032.0000	0137.5	046.5	259.3	050.0000	0136.5	137.1	39.75
081.0	032.0000	0137.8	046.5	259.0	050.0000	0135.7	137.1	39.73
082.0	032.0000	0138.7	046.6	258.6	050.0000	0134.7	137.1	39.72
083.0	032.0000	0139.8	046.8	258.3	050.0000	0133.6	137.0	39.70
084.0	032.0000	0140.9	046.9	258.0	050.0000	0132.4	136.9	39.68
085.0	032.0000	0142.3	047.1	257.6	050.0000	0131.3	136.9	39.66
086.0	032.0000	0143.6	047.3	257.2	050.0000	0130.4	136.8	39.65
087.0	032.0000	0144.8	047.5	256.9	050.0000	0129.4	136.8	39.62
088.0	032.0000	0146.0	047.7	256.5	050.0000	0128.2	136.8	39.59
089.0	032.0000	0146.9	047.8	256.2	050.0000	0126.9	136.9	39.53
090.0	032.0000	0147.0	047.8	255.8	050.0000	0125.8	137.1	39.47
091.0	032.0000	0147.5	047.8	255.5	050.0000	0124.8	137.3	39.41
092.0	032.0000	0148.4	048.0	255.2	050.0000	0124.1	137.4	39.36
093.0	032.0000	0149.4	048.1	254.8	050.0000	0123.4	137.6	39.31
094.0	032.0000	0150.3	048.2	254.5	050.0000	0122.4	137.7	39.25
095.0	032.0000	0151.3	048.4	254.1	050.0000	0121.1	137.9	39.18
096.0	032.0000	0151.9	048.4	253.8	050.0000	0119.6	138.2	39.09
097.0	032.0000	0152.0	048.5	253.5	050.0000	0118.5	138.5	38.99
098.0	032.0000	0151.3	048.4	253.2	050.0000	0117.6	139.0	38.88
099.0	032.0000	0150.5	048.3	252.9	050.0000	0116.6	139.5	38.76
100.0	032.0000	0149.6	048.1	252.6	050.0000	0115.8	140.0	38.64
101.0	032.0000	0148.1	047.9	252.3	050.0000	0115.2	140.6	38.50
102.0	032.0000	0146.5	047.7	252.1	050.0000	0114.6	141.2	38.37
103.0	032.0000	0145.2	047.5	251.8	050.0000	0114.3	141.8	38.25
104.0	032.0000	0144.0	047.4	251.6	050.0000	0113.9	142.4	38.13
105.0	032.0000	0143.7	047.3	251.3	050.0000	0113.6	142.9	38.02
106.0	032.0000	0143.4	047.3	251.1	050.0000	0113.3	143.4	37.92
107.0	032.0000	0142.9	047.2	250.8	050.0000	0113.0	143.9	37.81
108.0	032.0000	0142.8	047.2	250.6	050.0000	0112.8	144.5	37.71
109.0	032.0000	0143.5	047.3	250.3	050.0000	0112.8	144.9	37.62
110.0	032.0000	0143.9	047.4	250.0	050.0000	0112.8	145.4	37.54
111.0	032.0000	0143.9	047.4	249.8	050.0000	0113.1	146.0	37.45
112.0	032.0000	0144.0	047.4	249.5	050.0000	0113.3	146.5	37.36
113.0	032.0000	0144.8	047.5	249.3	050.0000	0113.6	147.0	37.28
114.0	032.0000	0145.9	047.6	249.0	050.0000	0113.5	147.5	37.19

115.0	032.0000	0146.5	047.7	248.8	050.0000	0113.3	148.1	37.09
116.0	032.0000	0146.8	047.8	248.6	050.0000	0113.0	148.7	36.98
117.0	032.0000	0147.3	047.8	248.3	050.0000	0112.8	149.3	36.88
118.0	032.0000	0147.8	047.9	248.1	050.0000	0112.7	149.9	36.77
119.0	032.0000	0147.9	047.9	247.9	050.0000	0112.6	150.5	36.66
120.0	032.0000	0147.9	047.9	247.7	050.0000	0112.6	151.2	36.55
121.0	032.0000	0147.9	047.9	247.5	050.0000	0112.7	151.9	36.44
122.0	032.0000	0147.7	047.9	247.4	050.0000	0112.8	152.6	36.33
123.0	032.0000	0147.5	047.8	247.2	050.0000	0113.1	153.3	36.22
124.0	032.0000	0147.5	047.8	247.0	050.0000	0113.4	154.0	36.12
125.0	032.0000	0148.0	047.9	246.8	050.0000	0113.7	154.7	36.02
126.0	032.0000	0148.7	048.0	246.7	050.0000	0114.0	155.4	35.91
127.0	032.0000	0149.2	048.1	246.5	050.0000	0114.1	156.1	35.80
128.0	032.0000	0149.1	048.1	246.4	050.0000	0114.2	156.8	35.68
129.0	032.0000	0149.1	048.1	246.2	050.0000	0114.3	157.6	35.55
130.0	032.0000	0149.1	048.1	246.1	050.0000	0114.5	158.3	35.43
131.0	032.0000	0149.1	048.1	246.0	050.0000	0114.8	159.1	35.30
132.0	032.0000	0149.0	048.0	245.9	050.0000	0115.0	159.9	35.18
133.0	032.0000	0149.0	048.1	245.7	050.0000	0115.3	160.7	35.05
134.0	032.0000	0148.7	048.0	245.7	050.0000	0115.5	161.5	34.91
135.0	032.0000	0148.4	048.0	245.6	050.0000	0115.7	162.3	34.77
136.0	032.0000	0148.7	048.0	245.5	050.0000	0115.9	163.0	34.63
137.0	032.0000	0149.6	048.1	245.3	050.0000	0116.2	163.8	34.51

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