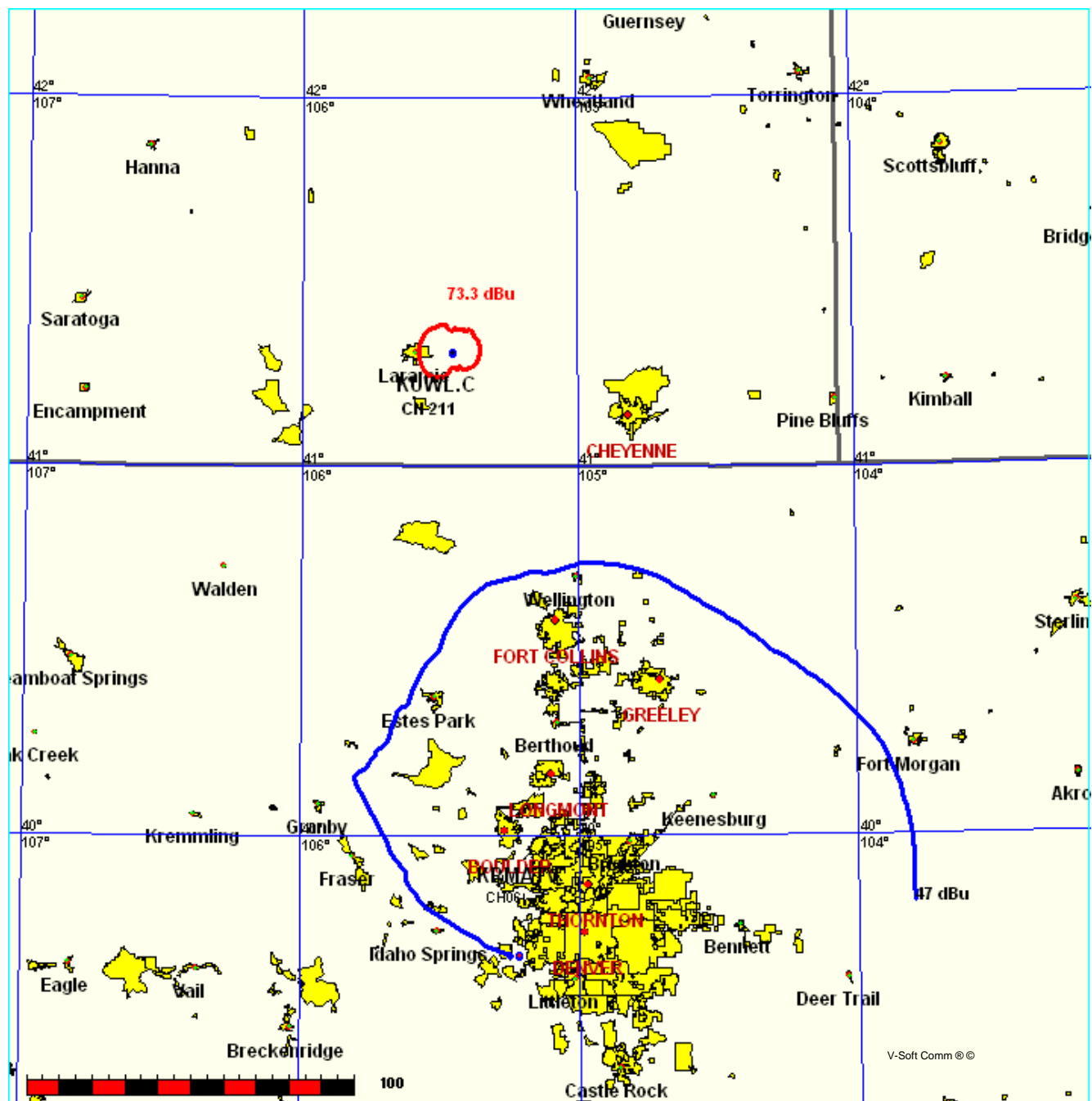


University Of Wyoming  
KUWL (New) v. KRMA-TV (CP)

FMCommander Single Allocation Study  
01-08-2008

KUWL.C CH 211 A  
0.113 kW 2699 M COR  
Intef. = 73.3 dBu

KRMATV CH 06- 2E BPET19990107KE 3  
100.0 kW, 2363 M COR DA  
Prot. = 47 dBu



01-08-2008 USGS 03 SEC Terrain Data

KRMATV BPET19990107KE 3  
 Channel = 06-2E  
 Max ERP = 100 kW  
 RCAMSL = 2363 M  
 N. Lat. 39 40 25.0  
 W. Lng. 105 13 01.0  
 Protected  
 47 dBu

KUWL.C  
 Channel = 211A  
 Max ERP = 0.11275 kW  
 RCAMSL = 2699 M  
 N. Lat. 41 18 36.0  
 W. Lng. 105 27 17.0  
 Interfering  
 73.3 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
294.0	000.3158	0042.4	019.1	179.1	000.1128	0090.5	174.0	05.35
295.0	000.4225	0050.1	022.3	180.0	000.1128	0086.7	172.3	05.52
296.0	000.5446	0065.7	026.7	181.3	000.1128	0087.6	170.1	05.96
297.0	000.6823	0080.7	030.8	182.5	000.1128	0089.2	167.9	06.41
298.0	000.8354	0087.8	033.7	183.3	000.1128	0092.5	166.2	06.84
299.0	001.0040	0089.3	035.4	183.8	000.1128	0094.3	164.9	07.14
300.0	001.1881	0085.7	036.1	183.9	000.1128	0094.7	164.0	07.31
301.0	001.4641	0085.1	037.6	184.3	000.1128	0095.9	162.8	07.58
302.0	001.7689	0088.7	039.8	184.9	000.1128	0099.4	161.2	07.98
303.0	002.1025	0090.2	041.5	185.3	000.1128	0102.9	159.8	08.35
304.0	002.4649	0084.4	041.7	185.2	000.1128	0102.4	159.1	08.46
305.0	002.8561	0081.7	042.4	185.3	000.1128	0103.1	158.1	08.65
306.0	003.2761	0078.5	042.8	185.3	000.1128	0103.1	157.2	08.80
307.0	003.7249	0086.7	045.6	186.1	000.1128	0109.3	155.1	09.34
308.0	004.2025	0095.0	048.3	186.8	000.1128	0117.3	153.0	09.92
309.0	004.7089	0103.5	051.0	187.5	000.1128	0127.2	150.9	10.54
310.0	005.2441	0107.2	052.6	187.8	000.1128	0132.0	149.3	10.93
311.0	005.8806	0112.6	054.5	188.3	000.1128	0137.4	147.4	11.38
312.0	006.5536	0121.5	056.9	188.8	000.1128	0144.1	145.3	11.93
313.0	007.2630	0135.2	059.9	189.6	000.1128	0153.4	142.9	12.63
314.0	008.0089	0154.8	063.5	190.6	000.1128	0164.2	139.9	13.47
315.0	008.7912	0178.6	067.2	191.6	000.1128	0176.8	137.0	14.37
316.0	009.6100	0210.6	071.1	192.7	000.1128	0185.4	133.8	15.19
317.0	010.4652	0227.0	073.5	193.3	000.1128	0188.7	131.4	15.73
318.0	011.3569	0222.8	073.9	193.1	000.1128	0187.6	130.1	15.96
319.0	012.2850	0211.4	073.6	192.7	000.1128	0185.1	129.3	16.07
320.0	013.2496	0199.7	073.3	192.2	000.1128	0182.4	128.4	16.17
321.0	014.2582	0195.2	073.6	192.0	000.1128	0180.5	127.3	16.36
322.0	015.3037	0191.0	073.9	191.7	000.1128	0177.8	126.1	16.52
323.0	016.3863	0188.2	074.3	191.4	000.1128	0174.7	124.8	16.69
324.0	017.5059	0187.9	075.0	191.3	000.1128	0172.3	123.4	16.90
325.0	018.6624	0187.5	075.6	191.0	000.1128	0169.8	122.1	17.10
326.0	019.8559	0181.0	075.6	190.6	000.1128	0164.3	121.1	17.14
327.0	021.0865	0174.7	075.6	190.1	000.1128	0158.8	120.2	17.15
328.0	022.3540	0171.4	075.8	189.8	000.1128	0154.9	119.1	17.24

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
329.0	023.6585	0175.3	076.8	189.6	000.1128	0153.2	117.5	17.50
330.0	025.0000	0184.7	078.3	189.5	000.1128	0152.8	115.5	17.87
331.0	026.2656	0193.8	079.6	189.4	000.1128	0151.6	113.6	18.20
332.0	027.5625	0203.1	081.0	189.3	000.1128	0149.9	111.7	18.52
333.0	028.8906	0209.4	082.0	189.0	000.1128	0146.6	110.0	18.76
334.0	030.2500	0212.5	082.8	188.6	000.1128	0141.6	108.6	18.89
335.0	031.6406	0208.1	082.8	188.0	000.1128	0134.4	107.7	18.83
336.0	033.0625	0207.3	083.2	187.5	000.1128	0127.0	106.6	18.81
337.0	034.5156	0220.5	084.8	187.2	000.1128	0123.5	104.4	19.17
338.0	036.0000	0236.4	086.7	187.0	000.1128	0120.5	102.1	19.61
339.0	037.5156	0245.7	088.0	186.6	000.1128	0115.0	100.2	19.84
340.0	039.0625	0258.0	089.6	186.2	000.1128	0110.6	098.1	20.18
341.0	040.3733	0269.3	091.0	185.7	000.1128	0106.5	096.2	20.50
342.0	041.7058	0278.3	092.2	185.1	000.1128	0101.4	094.5	20.72
343.0	043.0598	0286.0	093.2	184.5	000.1128	0096.6	092.9	20.92
344.0	044.4356	0287.9	093.7	183.6	000.1128	0093.5	091.9	21.05
345.0	045.8329	0297.3	094.8	182.9	000.1128	0090.3	090.3	21.32
346.0	047.2519	0331.8	097.6	182.4	000.1128	0088.8	087.1	22.09
347.0	048.6925	0361.3	099.8	181.6	000.1128	0088.0	084.6	22.74
348.0	050.1547	0383.0	101.7	180.8	000.1128	0086.9	082.3	23.30
349.0	051.6386	0403.6	103.7	179.8	000.1128	0087.1	080.0	23.95
350.0	053.1441	0422.9	105.6	178.8	000.1128	0091.7	077.7	24.81
351.0	054.2285	0437.1	107.1	177.5	000.1128	0093.7	076.0	25.38
352.0	055.3238	0453.1	108.7	176.2	000.1128	0093.2	074.3	25.85
353.0	056.4301	0467.4	110.2	174.8	000.1128	0089.7	072.7	26.10
354.0	057.5474	0476.3	111.2	173.3	000.1128	0087.3	071.6	26.27
355.0	058.6756	0487.1	112.4	171.7	000.1128	0093.4	070.5	26.95
356.0	059.8147	0488.9	112.8	170.0	000.1128	0098.9	070.2	27.34
357.0	060.9649	0488.7	113.1	168.4	000.1128	0103.6	070.2	27.60
358.0	062.1259	0490.7	113.5	166.8	000.1128	0106.9	070.2	27.80
359.0	063.2979	0492.9	113.9	165.1	000.1128	0114.4	070.2	28.20
000.0	064.4809	0496.2	114.5	163.4	000.1128	0123.2	070.2	28.66
001.0	065.1088	0503.0	115.2	161.7	000.1128	0125.7	070.1	28.81
002.0	065.7397	0506.6	115.6	160.0	000.1128	0124.5	070.4	28.66
003.0	066.3736	0504.7	115.6	158.5	000.1128	0123.9	071.2	28.37
004.0	067.0106	0502.8	115.5	157.1	000.1128	0119.0	072.1	27.84
005.0	067.6506	0506.2	116.0	155.5	000.1128	0101.7	072.7	26.76
006.0	068.2937	0512.9	116.7	153.8	000.1128	0093.8	073.1	26.20
007.0	068.9398	0524.5	117.8	152.0	000.1128	0099.1	073.3	26.44
008.0	069.5890	0535.5	118.8	150.2	000.1128	0105.7	073.7	26.68
009.0	070.2412	0545.7	119.8	148.5	000.1128	0125.7	074.3	27.52
010.0	070.8964	0552.0	120.4	147.0	000.1128	0140.3	075.3	27.95
011.0	070.5432	0557.2	120.7	145.7	000.1128	0156.1	076.5	28.31
012.0	070.1909	0560.4	120.8	144.5	000.1128	0167.4	077.9	28.37
013.0	069.8394	0566.2	121.2	143.3	000.1128	0177.5	079.3	28.37
014.0	069.4889	0570.5	121.4	142.2	000.1128	0183.2	080.8	28.14
015.0	069.1392	0575.0	121.7	141.2	000.1128	0187.5	082.3	27.82
016.0	068.7904	0578.9	121.8	140.2	000.1128	0189.3	083.9	27.38
017.0	068.4425	0580.7	121.9	139.4	000.1128	0189.5	085.7	26.84
018.0	068.0955	0582.0	121.9	138.6	000.1128	0189.9	087.5	26.29
019.0	067.7494	0583.4	121.9	137.9	000.1128	0190.5	089.3	25.75

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
020.0	067.4041	0584.7	122.0	137.3	000.1128	0191.2	091.2	25.21
021.0	065.8370	0585.7	121.7	136.8	000.1128	0192.0	093.2	24.64
022.0	064.2883	0586.7	121.5	136.4	000.1128	0192.8	095.2	24.07
023.0	062.7581	0587.5	121.2	136.0	000.1128	0193.6	097.3	23.51
024.0	061.2463	0588.6	121.0	135.6	000.1128	0194.2	099.3	22.95
025.0	059.7529	0589.6	120.7	135.3	000.1128	0195.0	101.4	22.40
026.0	058.2780	0591.4	120.5	135.0	000.1128	0195.8	103.4	21.87
027.0	056.8214	0593.3	120.3	134.8	000.1128	0196.4	105.5	21.35
028.0	055.3834	0595.2	120.1	134.5	000.1128	0197.0	107.5	20.85
029.0	053.9637	0598.8	120.0	134.3	000.1128	0197.7	109.6	20.39
030.0	052.5625	0602.9	119.9	134.0	000.1128	0198.5	111.6	19.95
031.0	052.8384	0605.2	120.1	133.7	000.1128	0200.1	113.6	19.57
032.0	053.1149	0606.2	120.2	133.4	000.1128	0201.6	115.6	19.19
033.0	053.3923	0606.1	120.3	133.2	000.1128	0202.9	117.7	18.79
034.0	053.6703	0605.0	120.3	133.0	000.1128	0203.9	119.8	18.39
035.0	053.9490	0604.1	120.3	132.8	000.1128	0204.7	121.8	17.99
036.0	054.2285	0603.3	120.3	132.7	000.1128	0205.4	123.9	17.59
037.0	054.5087	0602.4	120.3	132.5	000.1128	0205.9	126.0	17.19
038.0	054.7896	0601.5	120.4	132.4	000.1128	0206.3	128.1	16.79
039.0	055.0712	0600.5	120.4	132.4	000.1128	0206.6	130.2	16.38
040.0	055.3536	0599.4	120.4	132.3	000.1128	0206.8	132.3	15.98
041.0	057.8360	0598.0	120.8	132.1	000.1128	0207.7	134.4	15.59
042.0	060.3729	0596.4	121.3	131.9	000.1128	0208.4	136.5	15.20
043.0	062.9642	0594.5	121.7	131.7	000.1128	0209.0	138.6	14.81
044.0	065.6100	0592.1	122.1	131.5	000.1128	0209.5	140.8	14.42
045.0	068.3102	0589.8	122.5	131.4	000.1128	0209.9	142.9	14.02
046.0	071.0649	0588.4	122.9	131.3	000.1128	0210.3	145.1	13.63
047.0	073.8740	0587.6	123.3	131.2	000.1128	0210.7	147.3	13.25
048.0	076.7376	0587.4	123.8	131.1	000.1128	0211.1	149.4	12.87
049.0	079.6556	0588.0	124.3	131.0	000.1128	0211.4	151.7	12.50
050.0	082.6281	0587.9	124.8	130.9	000.1128	0211.7	153.9	12.13
051.0	084.2908	0587.9	125.1	131.0	000.1128	0211.6	156.1	11.75
052.0	085.9700	0588.2	125.3	131.0	000.1128	0211.5	158.3	11.37
053.0	087.6658	0589.5	125.7	131.0	000.1128	0211.4	160.5	10.98
054.0	089.3781	0591.5	126.1	131.0	000.1128	0211.3	162.7	10.59

# Channel-Six TV Protection Study

KRMATV CP 06- 2E Dom Int 100.000 kW 342 M HAAT VCY DA=D  
Denver CO 2363.0 M COR AMSL  
Lat= 39 40 25.0, Lng= 105 13 01.0  
Rocky Mountain Public Broadc BPET19990107KE 3  
Fac ID# 14040  
Dist.=182.82 km, Azi=173.6°, Rev Azi=353.8°

Direct line HAAT Grade B, 47 dBu= 110.96 km & Grade A= 59.58 km

Distance from reference to Grade B = 71.86 km

Cutoff Dist from Full Service or Class CA= 196

Maximum Co-located power= 26.3 kW

KRMATV Signal Contour at Reference location = 27.8 dBu

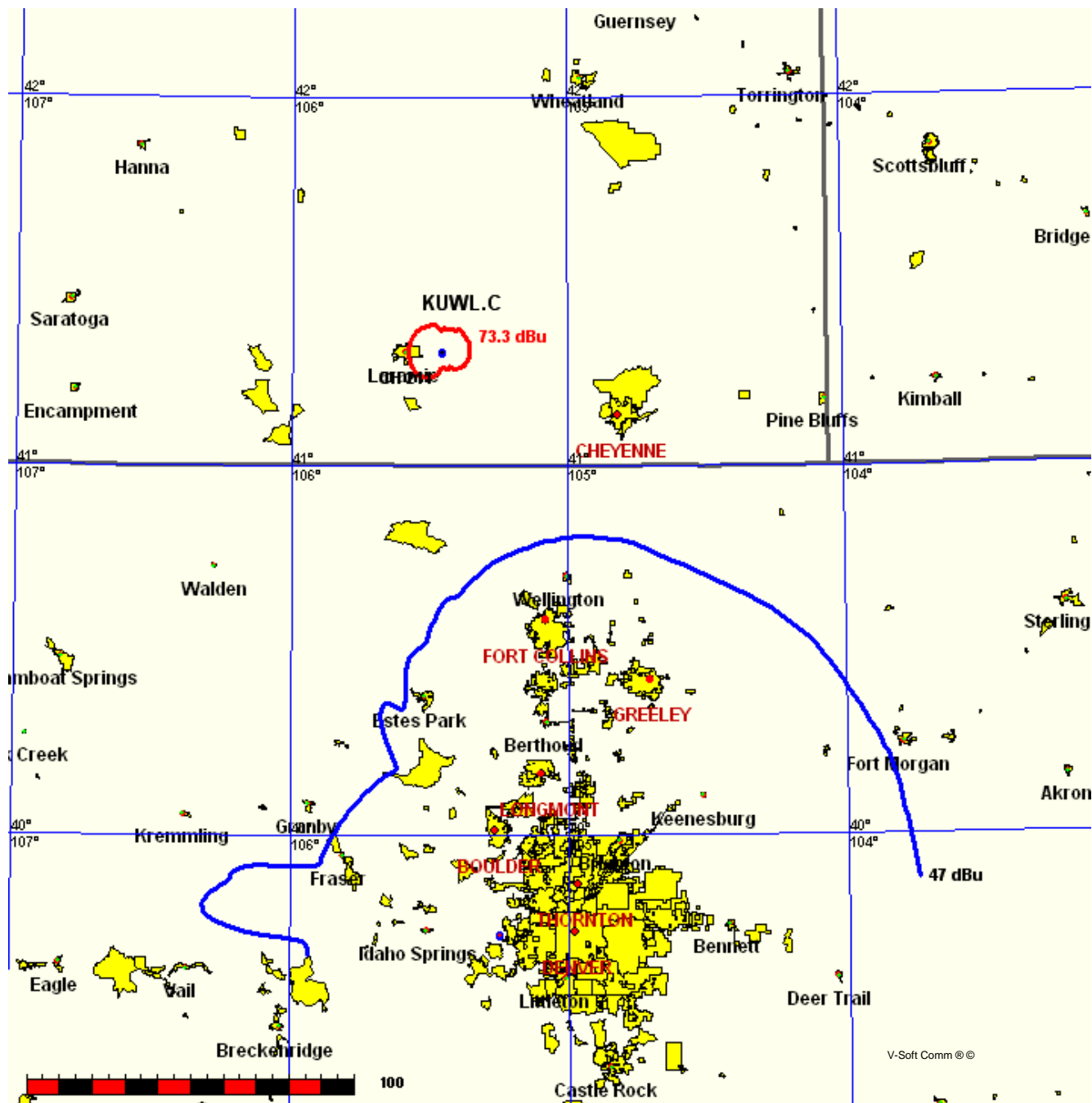
CH. 211, U/D ratio = 26.3 dB, Maximum FM signal = 73.3 dBu , 6 dB credit added

## TV/FM D to U values

47.0	73.3	55.0	72.3	63.0	73.9	71.0	78.7	79.0	85.0	87.0	91.6
48.0	73.0	56.0	72.4	64.0	74.4	72.0	79.5	80.0	85.8	88.0	92.4
49.0	72.6	57.0	72.5	65.0	74.8	73.0	80.2	81.0	86.6	89.0	93.3
50.0	72.3	58.0	72.6	66.0	75.4	74.0	81.0	82.0	87.4	90.0	94.2
51.0	72.2	59.0	72.8	67.0	76.0	75.0	81.8	83.0	88.2	91.0	94.2
52.0	72.2	60.0	73.0	68.0	76.6	76.0	82.6	84.0	89.0	92.0	94.2
53.0	72.1	61.0	73.3	69.0	77.3	77.0	83.4	85.0	89.9	93.0	94.2
54.0	72.2	62.0	73.5	70.0	78.0	78.0	84.2	86.0	90.7	94.0	94.2

KUWL.C CH 211 A  
0.113 kW 2699 M COR  
Intef. = 73.3 dBu

KRMATV CH 06- 2E BLET19950504KE 7  
100.0 kW, 2349 M COR  
Prot. = 47 dBu



01-08-2008 USGS 03 SEC Terrain Data

KRMATV BLET19950504KE 7  
 Channel = 06-2E  
 Max ERP = 100 kW  
 RCAMSL = 2349 M  
 N. Lat. 39 43 49.0  
 W. Lng. 105 15 00.0  
 Protected  
 47 dBu

KUWL.C  
 Channel = 211A  
 Max ERP = 0.11275 kW  
 RCAMSL = 2699 M  
 N. Lat. 41 18 36.0  
 W. Lng. 105 27 17.0  
 Interfering  
 73.3 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
294.0	100.0000	0021.6	059.0	193.6	000.1128	0191.4	155.8	11.38
295.0	100.0000	0022.2	059.0	193.6	000.1128	0191.1	154.8	11.54
296.0	100.0000	0019.9	059.0	193.5	000.1128	0190.5	153.8	11.69
297.0	100.0000	0008.8	059.0	193.4	000.1128	0189.9	152.8	11.84
298.0	100.0000	-0010.2	059.0	193.3	000.1128	0189.2	151.8	11.99
299.0	100.0000	-0032.8	059.0	193.2	000.1128	0188.4	150.8	12.13
300.0	100.0000	-0071.3	059.0	193.1	000.1128	0187.7	149.8	12.28
301.0	100.0000	-0093.0	059.0	193.0	000.1128	0186.9	148.8	12.43
302.0	100.0000	-0095.4	059.0	192.9	000.1128	0186.2	147.8	12.57
303.0	100.0000	-0088.1	059.0	192.7	000.1128	0185.5	146.8	12.72
304.0	100.0000	-0075.8	059.0	192.6	000.1128	0184.7	145.9	12.88
305.0	100.0000	-0068.2	059.0	192.4	000.1128	0183.9	144.9	13.03
306.0	100.0000	-0053.1	059.0	192.3	000.1128	0182.9	144.0	13.18
307.0	100.0000	-0034.8	059.0	192.1	000.1128	0181.6	143.0	13.32
308.0	100.0000	-0023.3	059.0	191.9	000.1128	0180.2	142.1	13.46
309.0	100.0000	-0025.1	059.0	191.7	000.1128	0178.4	141.2	13.59
310.0	100.0000	-0040.7	059.0	191.5	000.1128	0176.0	140.3	13.71
311.0	100.0000	-0065.1	059.0	191.3	000.1128	0173.3	139.4	13.81
312.0	100.0000	-0082.8	059.0	191.1	000.1128	0170.7	138.5	13.92
313.0	100.0000	-0096.8	059.0	190.9	000.1128	0168.2	137.6	14.03
314.0	100.0000	-0112.2	059.0	190.7	000.1128	0165.1	136.8	14.12
315.0	100.0000	-0121.1	059.0	190.4	000.1128	0162.0	135.9	14.21
316.0	100.0000	-0137.2	059.0	190.2	000.1128	0159.0	135.1	14.29
317.0	100.0000	-0144.4	059.0	189.9	000.1128	0156.3	134.2	14.38
318.0	100.0000	-0130.1	059.0	189.6	000.1128	0153.7	133.4	14.48
319.0	100.0000	-0109.4	059.0	189.3	000.1128	0150.7	132.6	14.56
320.0	100.0000	-0091.5	059.0	189.1	000.1128	0147.1	131.8	14.61
321.0	100.0000	-0077.5	059.0	188.8	000.1128	0143.2	131.1	14.66
322.0	100.0000	-0063.6	059.0	188.4	000.1128	0139.6	130.3	14.71
323.0	100.0000	-0054.8	059.0	188.1	000.1128	0136.0	129.6	14.75
324.0	100.0000	-0043.6	059.0	187.8	000.1128	0131.8	128.9	14.77
325.0	100.0000	-0030.5	059.0	187.5	000.1128	0127.2	128.1	14.78
326.0	100.0000	-0016.2	059.0	187.1	000.1128	0122.0	127.5	14.76
327.0	100.0000	0003.0	059.0	186.8	000.1128	0117.0	126.8	14.75
328.0	100.0000	0025.0	059.0	186.4	000.1128	0112.7	126.1	14.74

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
329.0	100.0000	0048.3	066.8	188.3	000.1128	0137.5	119.4	16.66
330.0	100.0000	0061.3	070.9	189.1	000.1128	0147.6	115.5	17.72
331.0	100.0000	0075.4	074.9	189.9	000.1128	0156.0	111.5	18.75
332.0	100.0000	0083.1	076.9	190.0	000.1128	0157.0	109.1	19.29
333.0	100.0000	0087.1	077.9	189.7	000.1128	0154.7	107.5	19.56
334.0	100.0000	0084.6	077.3	188.9	000.1128	0145.7	107.2	19.32
335.0	100.0000	0079.1	075.9	187.9	000.1128	0133.6	107.7	18.81
336.0	100.0000	0071.8	073.9	186.8	000.1128	0117.4	108.6	18.06
337.0	100.0000	0072.7	074.2	186.3	000.1128	0111.2	107.8	18.03
338.0	100.0000	0083.8	077.1	186.4	000.1128	0112.7	104.6	18.76
339.0	100.0000	0098.0	080.4	186.6	000.1128	0114.8	101.0	19.64
340.0	100.0000	0114.2	083.5	186.7	000.1128	0115.7	097.6	20.50
341.0	100.0000	0132.4	086.3	186.6	000.1128	0115.1	094.4	21.30
342.0	100.0000	0146.0	088.1	186.2	000.1128	0110.9	092.1	21.73
343.0	100.0000	0150.9	088.8	185.5	000.1128	0104.6	091.0	21.77
344.0	100.0000	0157.2	089.5	184.8	000.1128	0098.4	089.7	21.84
345.0	100.0000	0162.2	090.1	183.9	000.1128	0094.8	088.6	21.97
346.0	100.0000	0174.0	091.4	183.2	000.1128	0092.0	086.9	22.31
347.0	100.0000	0203.8	094.5	182.8	000.1128	0090.0	083.5	23.14
348.0	100.0000	0225.3	096.6	182.0	000.1128	0088.3	081.0	23.72
349.0	100.0000	0247.2	098.7	181.2	000.1128	0087.5	078.6	24.35
350.0	100.0000	0269.1	100.8	180.2	000.1128	0086.5	076.2	24.96
351.0	100.0000	0285.4	102.3	179.1	000.1128	0090.8	074.4	25.68
352.0	100.0000	0285.0	102.3	177.7	000.1128	0093.6	074.2	25.88
353.0	100.0000	0290.5	102.7	176.3	000.1128	0093.3	073.6	26.05
354.0	100.0000	0310.9	104.4	175.0	000.1128	0090.0	071.8	26.36
355.0	100.0000	0339.3	106.5	173.5	000.1128	0087.3	069.8	26.79
356.0	100.0000	0355.8	107.7	171.9	000.1128	0092.4	068.7	27.41
357.0	100.0000	0371.0	108.9	170.2	000.1128	0098.4	067.7	28.06
358.0	100.0000	0391.0	110.6	168.4	000.1128	0103.8	066.3	28.80
359.0	100.0000	0406.0	111.9	166.5	000.1128	0107.8	065.4	29.32
000.0	100.0000	0418.5	113.0	164.6	000.1128	0117.5	064.7	30.06
001.0	100.0000	0429.9	114.0	162.6	000.1128	0125.2	064.3	30.61
002.0	100.0000	0441.2	115.1	160.6	000.1128	0125.1	064.1	30.69
003.0	100.0000	0451.3	116.0	158.6	000.1128	0123.9	064.0	30.65
004.0	100.0000	0458.2	116.6	156.8	000.1128	0115.9	064.3	30.11
005.0	100.0000	0471.1	117.8	154.7	000.1128	0095.0	064.3	28.88
006.0	100.0000	0480.4	118.6	152.7	000.1128	0099.2	064.6	29.03
007.0	100.0000	0486.9	119.2	150.9	000.1128	0101.9	065.3	28.98
008.0	100.0000	0494.3	119.9	149.1	000.1128	0120.2	066.0	29.79
009.0	100.0000	0504.1	120.8	147.2	000.1128	0138.1	066.7	30.53
010.0	100.0000	0512.8	121.5	145.4	000.1128	0159.0	067.6	31.32
011.0	100.0000	0521.0	122.2	143.8	000.1128	0174.0	068.7	31.68
012.0	100.0000	0526.9	122.7	142.3	000.1128	0183.0	069.9	31.65
013.0	100.0000	0531.2	123.1	141.0	000.1128	0188.1	071.4	31.39
014.0	100.0000	0534.1	123.3	139.8	000.1128	0189.4	073.0	30.92
015.0	100.0000	0537.6	123.6	138.6	000.1128	0189.9	074.6	30.41
016.0	100.0000	0542.4	124.0	137.5	000.1128	0190.9	076.2	29.93
017.0	100.0000	0547.3	124.4	136.4	000.1128	0192.7	077.9	29.46
018.0	100.0000	0550.5	124.6	135.5	000.1128	0194.5	079.7	28.95
019.0	100.0000	0552.4	124.7	134.7	000.1128	0196.5	081.5	28.43



Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
020.0	100.0000	0552.4	124.7	134.1	000.1128	0198.4	083.5	27.88
021.0	100.0000	0551.3	124.7	133.5	000.1128	0200.8	085.5	27.33
022.0	100.0000	0549.7	124.5	133.1	000.1128	0203.5	087.6	26.78
023.0	100.0000	0548.3	124.4	132.6	000.1128	0205.6	089.7	26.22
024.0	100.0000	0547.7	124.4	132.2	000.1128	0207.2	091.7	25.64
025.0	100.0000	0548.1	124.4	131.8	000.1128	0208.8	093.8	25.07
026.0	100.0000	0549.7	124.5	131.3	000.1128	0210.3	095.9	24.51
027.0	100.0000	0550.3	124.6	130.9	000.1128	0211.6	098.0	23.93
028.0	100.0000	0553.1	124.8	130.5	000.1128	0213.1	100.0	23.38
029.0	100.0000	0557.3	125.1	130.1	000.1128	0214.4	102.1	22.83
030.0	100.0000	0560.4	125.3	129.7	000.1128	0215.5	104.2	22.28
031.0	100.0000	0562.4	125.5	129.5	000.1128	0216.3	106.3	21.73
032.0	100.0000	0564.2	125.6	129.2	000.1128	0216.9	108.5	21.20
033.0	100.0000	0567.5	125.9	128.9	000.1128	0217.6	110.6	20.69
034.0	100.0000	0572.3	126.2	128.6	000.1128	0218.2	112.8	20.22
035.0	100.0000	0578.6	126.7	128.3	000.1128	0218.9	115.0	19.76
036.0	100.0000	0585.3	127.1	128.0	000.1128	0219.6	117.2	19.31
037.0	100.0000	0590.7	127.5	127.8	000.1128	0220.2	119.4	18.86
038.0	100.0000	0596.3	127.9	127.6	000.1128	0220.9	121.6	18.42
039.0	100.0000	0601.8	128.2	127.4	000.1128	0221.4	123.8	17.98
040.0	100.0000	0606.7	128.6	127.3	000.1128	0221.9	126.1	17.54
041.0	100.0000	0611.5	128.9	127.2	000.1128	0222.3	128.3	17.10
042.0	100.0000	0616.5	129.2	127.2	000.1128	0222.6	130.6	16.67
043.0	100.0000	0621.2	129.5	127.1	000.1128	0222.7	132.9	16.23
044.0	100.0000	0625.9	129.8	127.1	000.1128	0222.8	135.2	15.79
045.0	100.0000	0630.6	130.0	127.1	000.1128	0222.9	137.5	15.35
046.0	100.0000	0634.2	130.3	127.1	000.1128	0222.7	139.7	14.91
047.0	100.0000	0636.2	130.4	127.2	000.1128	0222.4	142.0	14.47
048.0	100.0000	0636.4	130.4	127.3	000.1128	0221.8	144.2	14.05
049.0	100.0000	0635.5	130.3	127.5	000.1128	0221.2	146.5	13.63
050.0	100.0000	0634.1	130.2	127.7	000.1128	0220.5	148.7	13.22
051.0	100.0000	0632.6	130.2	127.9	000.1128	0219.8	150.9	12.82
052.0	100.0000	0631.0	130.1	128.2	000.1128	0219.2	153.1	12.42
053.0	100.0000	0629.8	130.0	128.4	000.1128	0218.8	155.3	12.04
054.0	100.0000	0628.2	129.9	128.6	000.1128	0218.3	157.4	11.65

# Channel-Six TV Protection Study

KRMATV LI 06- 2E Dom Int 100.000 kW 292 M HAAT VHY  
Denver CO 2349.0 M COR AMSL  
Lat= 39 43 49.0, Lng= 105 15 00.0  
Rocky Mountain Public Broadc BLET19950504KE 7  
Fac ID# 14040  
Dist.=176.27 km, Azi=174.3°, Rev Azi=354.4°

Direct line HAAT Grade B, 47 dBu= 105.24 km & Grade A= 55.78 km

Distance from reference to Grade B = 71.03 km

Cutoff Dist from Full Service or Class CA= 196

Maximum Co-located power= 26.3 kW

KRMATV Signal Contour at Reference location = 28.9 dBu

CH. 211, U/D ratio = 26.3 dB, Maximum FM signal = 73.3 dBu , 6 dB credit added

## TV/FM D to U values

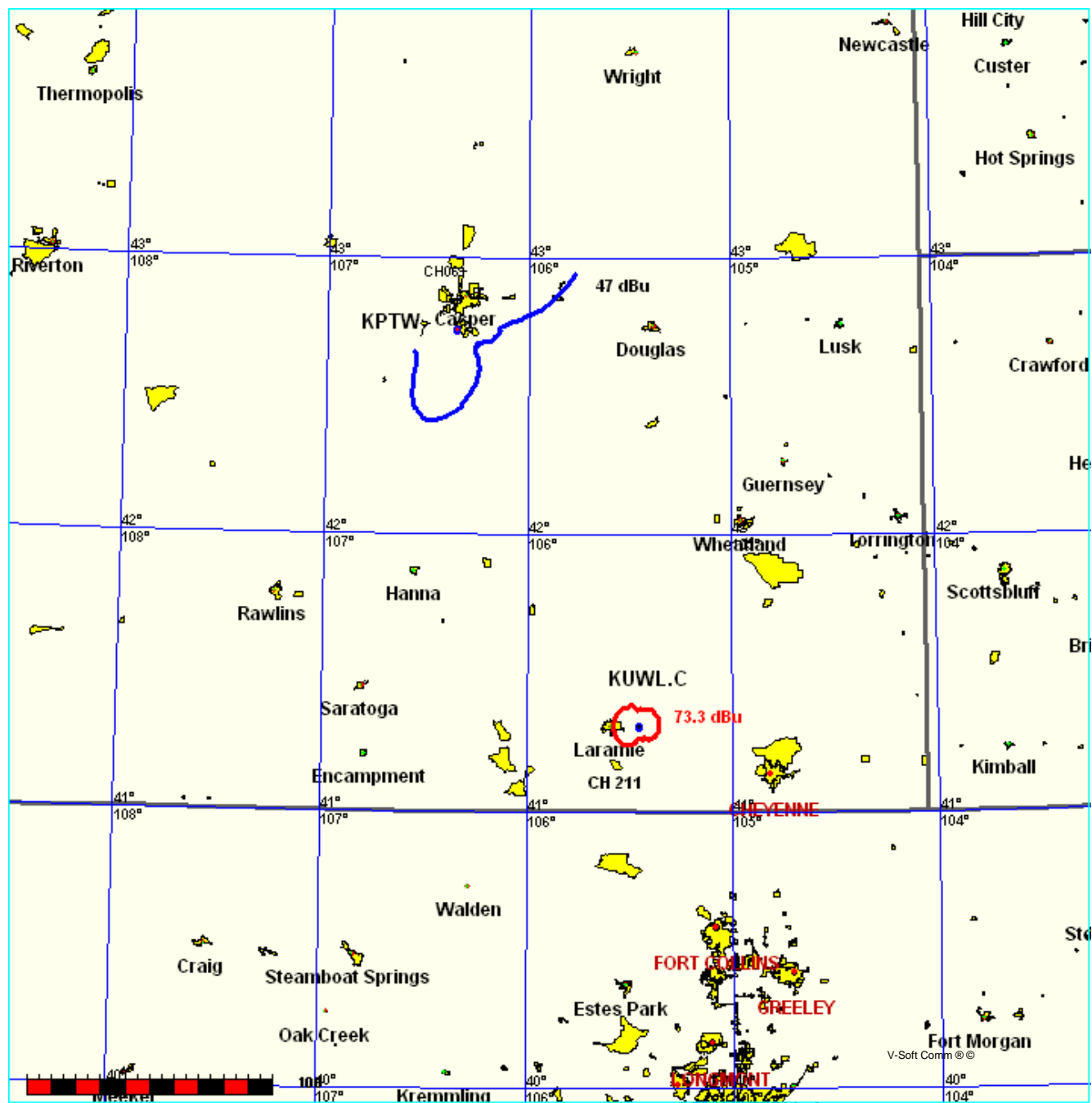
47.0	73.3	55.0	72.3	63.0	73.9	71.0	78.7	79.0	85.0	87.0	91.6
48.0	73.0	56.0	72.4	64.0	74.4	72.0	79.5	80.0	85.8	88.0	92.4
49.0	72.6	57.0	72.5	65.0	74.8	73.0	80.2	81.0	86.6	89.0	93.3
50.0	72.3	58.0	72.6	66.0	75.4	74.0	81.0	82.0	87.4	90.0	94.2
51.0	72.2	59.0	72.8	67.0	76.0	75.0	81.8	83.0	88.2	91.0	94.2
52.0	72.2	60.0	73.0	68.0	76.6	76.0	82.6	84.0	89.0	92.0	94.2
53.0	72.1	61.0	73.3	69.0	77.3	77.0	83.4	85.0	89.9	93.0	94.2
54.0	72.2	62.0	73.5	70.0	78.0	78.0	84.2	86.0	90.7	94.0	94.2

University Of Wyoming  
KUWL (New) v. KPTW

FMCommander Single Allocation Study  
01-08-2008

KUWL.C CH 211 A  
0.113 kW 2699 M COR  
Intef. = 73.3 dBu

KPTW CH 06+ 2E BPET19960624KT 4  
0.331 kW, 2501 M COR DA  
Prot. = 47 dBu



01-08-2008 USGS 03 SEC Terrain Data

KPTW BPET19960624KT 4  
 Channel = 06+2E  
 Max ERP = 0.331 kW  
 RCAMSL = 2501 M  
 N. Lat. 42 44 26.0  
 W. Lng. 106 21 34.0  
 Protected  
 47 dBu

KUWL.C  
 Channel = 211A  
 Max ERP = 0.11275 kW  
 RCAMSL = 2699 M  
 N. Lat. 41 18 36.0  
 W. Lng. 105 27 17.0  
 Interfering  
 73.3 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
095.0	000.0043	0293.6	017.1	340.1	000.1128	0335.7	167.7	12.05
096.0	000.0039	0301.7	016.9	340.0	000.1128	0336.0	167.5	12.09
097.0	000.0035	0310.8	016.7	339.9	000.1128	0336.2	167.4	12.12
098.0	000.0032	0319.8	016.5	339.8	000.1128	0336.4	167.2	12.16
099.0	000.0028	0325.9	016.2	339.6	000.1128	0336.7	167.1	12.18
100.0	000.0025	0334.0	015.9	339.5	000.1128	0337.0	167.0	12.20
101.0	000.0024	0344.4	015.9	339.5	000.1128	0337.1	166.8	12.25
102.0	000.0023	0351.9	015.9	339.4	000.1128	0337.2	166.5	12.29
103.0	000.0021	0356.1	015.8	339.3	000.1128	0337.4	166.4	12.33
104.0	000.0020	0360.8	015.6	339.2	000.1128	0337.5	166.2	12.36
105.0	000.0019	0364.8	015.5	339.1	000.1128	0337.7	166.1	12.39
106.0	000.0018	0366.4	015.3	339.0	000.1128	0337.9	166.0	12.41
107.0	000.0017	0363.7	015.0	338.9	000.1128	0338.2	166.0	12.42
108.0	000.0016	0359.5	014.7	338.8	000.1128	0338.4	166.0	12.43
109.0	000.0015	0350.1	014.3	338.6	000.1128	0338.7	166.0	12.42
110.0	000.0014	0334.9	013.8	338.4	000.1128	0339.0	166.2	12.40
111.0	000.0014	0312.5	013.3	338.2	000.1128	0339.2	166.4	12.38
112.0	000.0014	0293.5	012.9	338.1	000.1128	0339.4	166.5	12.36
113.0	000.0014	0278.1	012.5	337.9	000.1128	0339.5	166.6	12.35
114.0	000.0014	0264.3	012.2	337.8	000.1128	0339.6	166.7	12.33
115.0	000.0014	0252.9	011.9	337.7	000.1128	0339.7	166.7	12.32
116.0	000.0013	0240.7	011.6	337.6	000.1128	0339.7	166.8	12.31
117.0	000.0013	0232.0	011.4	337.5	000.1128	0339.8	166.8	12.31
118.0	000.0013	0224.6	011.2	337.4	000.1128	0339.8	166.9	12.30
119.0	000.0013	0215.4	010.9	337.3	000.1128	0339.8	166.9	12.29
120.0	000.0013	0204.8	010.7	337.2	000.1128	0339.8	167.0	12.27
121.0	000.0014	0189.6	010.4	337.1	000.1128	0339.8	167.2	12.25
122.0	000.0014	0176.1	010.1	337.0	000.1128	0339.8	167.3	12.23
123.0	000.0015	0165.1	009.8	336.9	000.1128	0339.8	167.4	12.21
124.0	000.0015	0163.9	009.9	336.8	000.1128	0339.7	167.3	12.23
125.0	000.0016	0168.9	010.1	336.8	000.1128	0339.7	167.0	12.28
126.0	000.0016	0176.3	010.4	336.8	000.1128	0339.7	166.6	12.35
127.0	000.0017	0177.9	010.6	336.8	000.1128	0339.7	166.4	12.39
128.0	000.0017	0173.3	010.5	336.7	000.1128	0339.8	166.4	12.39
129.0	000.0018	0167.4	010.4	336.7	000.1128	0339.8	166.4	12.39

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
130.0	000.0019	0162.2	010.3	336.6	000.1128	0339.8	166.4	12.39
131.0	000.0021	0155.0	010.4	336.5	000.1128	0339.7	166.2	12.41
132.0	000.0024	0147.8	010.4	336.5	000.1128	0339.7	166.1	12.43
133.0	000.0026	0141.5	010.4	336.4	000.1128	0339.7	166.0	12.45
134.0	000.0029	0139.3	010.6	336.4	000.1128	0339.7	165.8	12.49
135.0	000.0032	0136.8	010.8	336.4	000.1128	0339.7	165.6	12.53
136.0	000.0036	0134.6	010.9	336.3	000.1128	0339.6	165.4	12.57
137.0	000.0039	0131.0	011.0	336.3	000.1128	0339.6	165.2	12.59
138.0	000.0043	0130.5	011.2	336.2	000.1128	0339.5	165.0	12.64
139.0	000.0046	0130.8	011.5	336.2	000.1128	0339.5	164.7	12.69
140.0	000.0050	0135.2	011.9	336.1	000.1128	0339.5	164.2	12.77
141.0	000.0057	0141.4	012.6	336.1	000.1128	0339.5	163.5	12.90
142.0	000.0065	0150.0	013.4	336.1	000.1128	0339.5	162.7	13.05
143.0	000.0073	0154.5	014.0	336.1	000.1128	0339.4	162.0	13.17
144.0	000.0081	0159.4	014.7	336.1	000.1128	0339.4	161.3	13.29
145.0	000.0090	0162.1	015.2	336.0	000.1128	0339.3	160.7	13.40
146.0	000.0100	0163.0	015.7	335.9	000.1128	0339.2	160.2	13.49
147.0	000.0109	0168.8	016.4	335.9	000.1128	0339.2	159.4	13.63
148.0	000.0120	0175.4	017.2	335.8	000.1128	0339.1	158.6	13.77
149.0	000.0131	0175.9	017.6	335.7	000.1128	0338.9	158.2	13.85
150.0	000.0142	0177.5	018.1	335.6	000.1128	0338.7	157.7	13.94
151.0	000.0149	0181.6	018.5	335.5	000.1128	0338.5	157.3	14.02
152.0	000.0156	0186.8	019.0	335.4	000.1128	0338.2	156.8	14.10
153.0	000.0163	0192.2	019.4	335.3	000.1128	0337.9	156.3	14.18
154.0	000.0171	0198.8	020.0	335.2	000.1128	0337.5	155.8	14.27
155.0	000.0178	0204.1	020.4	335.0	000.1128	0337.1	155.3	14.35
156.0	000.0186	0208.9	020.9	334.9	000.1128	0336.6	154.9	14.42
157.0	000.0194	0212.3	021.2	334.8	000.1128	0336.1	154.5	14.47
158.0	000.0202	0217.2	021.7	334.6	000.1128	0335.4	154.1	14.53
159.0	000.0210	0228.5	022.4	334.4	000.1128	0334.7	153.4	14.65
160.0	000.0219	0235.5	022.9	334.3	000.1128	0333.9	152.9	14.72
161.0	000.0223	0239.4	023.2	334.1	000.1128	0333.1	152.7	14.74
162.0	000.0227	0247.9	023.7	333.9	000.1128	0332.2	152.2	14.80
163.0	000.0231	0256.9	024.2	333.8	000.1128	0330.9	151.8	14.84
164.0	000.0235	0258.0	024.3	333.6	000.1128	0329.6	151.8	14.82
165.0	000.0239	0266.9	024.8	333.4	000.1128	0328.0	151.4	14.85
166.0	000.0243	0275.4	025.3	333.2	000.1128	0326.7	151.0	14.89
167.0	000.0247	0288.3	025.9	333.0	000.1128	0325.4	150.5	14.96
168.0	000.0251	0296.2	026.4	332.8	000.1128	0324.7	150.2	15.00
169.0	000.0255	0301.4	026.7	332.6	000.1128	0324.3	150.0	15.02
170.0	000.0260	0306.1	027.0	332.4	000.1128	0324.2	149.8	15.05
171.0	000.0262	0309.3	027.2	332.2	000.1128	0324.1	149.8	15.05
172.0	000.0264	0318.8	027.7	331.9	000.1128	0323.9	149.5	15.10
173.0	000.0267	0328.7	028.2	331.7	000.1128	0323.7	149.2	15.15
174.0	000.0269	0341.6	028.8	331.4	000.1128	0323.5	148.9	15.22
175.0	000.0272	0357.2	029.6	331.1	000.1128	0323.8	148.4	15.32
176.0	000.0274	0373.4	030.3	330.8	000.1128	0324.2	147.9	15.42
177.0	000.0277	0391.1	031.0	330.5	000.1128	0324.9	147.5	15.52
178.0	000.0279	0404.4	031.6	330.2	000.1128	0325.7	147.3	15.59
179.0	000.0282	0410.4	031.9	330.0	000.1128	0326.6	147.3	15.61
180.0	000.0284	0420.6	032.3	329.7	000.1128	0327.9	147.2	15.66

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
181.0	000.0282	0434.1	032.8	329.4	000.1128	0329.3	147.1	15.72
182.0	000.0279	0446.2	033.2	329.2	000.1128	0331.0	147.1	15.77
183.0	000.0277	0453.3	033.4	328.9	000.1128	0332.5	147.2	15.78
184.0	000.0274	0462.9	033.7	328.7	000.1128	0334.1	147.3	15.81
185.0	000.0272	0473.5	034.0	328.4	000.1128	0335.8	147.4	15.84
186.0	000.0269	0486.1	034.5	328.1	000.1128	0337.7	147.4	15.89
187.0	000.0267	0499.9	035.0	327.8	000.1128	0339.6	147.4	15.94
188.0	000.0264	0509.4	035.3	327.6	000.1128	0341.3	147.5	15.95
189.0	000.0262	0519.6	035.6	327.3	000.1128	0343.0	147.7	15.97
190.0	000.0260	0529.4	036.0	327.0	000.1128	0344.6	147.9	15.98
191.0	000.0255	0538.7	036.2	326.8	000.1128	0345.9	148.1	15.96
192.0	000.0251	0549.7	036.5	326.5	000.1128	0347.2	148.4	15.96
193.0	000.0247	0562.6	036.9	326.3	000.1128	0348.7	148.6	15.95
194.0	000.0243	0574.8	037.2	326.0	000.1128	0350.2	148.9	15.93
195.0	000.0239	0588.8	037.5	325.8	000.1128	0351.6	149.1	15.92
196.0	000.0235	0606.5	037.9	325.5	000.1128	0353.2	149.4	15.92
197.0	000.0231	0618.1	038.1	325.3	000.1128	0354.5	149.8	15.88
198.0	000.0227	0624.7	038.2	325.1	000.1128	0355.4	150.3	15.81
199.0	000.0223	0629.6	038.2	325.0	000.1128	0356.3	150.8	15.73
200.0	000.0219	0632.8	038.1	324.8	000.1128	0357.0	151.4	15.64
201.0	000.0210	0636.1	037.9	324.8	000.1128	0357.3	152.1	15.52
202.0	000.0202	0637.0	037.6	324.8	000.1128	0357.5	152.8	15.38
203.0	000.0194	0636.0	037.2	324.8	000.1128	0357.5	153.6	15.24
204.0	000.0186	0635.6	036.8	324.8	000.1128	0357.5	154.3	15.09
205.0	000.0178	0637.0	036.4	324.7	000.1128	0357.5	155.0	14.96
206.0	000.0171	0640.1	036.2	324.7	000.1128	0357.6	155.7	14.83
207.0	000.0163	0643.8	035.9	324.7	000.1128	0357.7	156.4	14.70
208.0	000.0156	0648.3	035.6	324.7	000.1128	0357.8	157.1	14.58
209.0	000.0149	0654.4	035.4	324.7	000.1128	0357.9	157.7	14.46
210.0	000.0142	0660.0	035.1	324.7	000.1128	0357.9	158.4	14.33
211.0	000.0131	0663.9	034.5	324.8	000.1128	0357.3	159.2	14.16
212.0	000.0120	0668.4	033.9	324.9	000.1128	0356.5	160.0	14.00
213.0	000.0109	0671.5	033.2	325.1	000.1128	0355.6	160.8	13.82
214.0	000.0100	0675.7	032.5	325.2	000.1128	0354.7	161.6	13.65
215.0	000.0090	0679.1	031.7	325.4	000.1128	0353.6	162.4	13.48

# Channel-Six TV Protection Study

KPTW CP 06+ 2E Dom Int 0.331 kW 536 M HAAT VHN DA=D  
Casper WY 2501.0 M COR AMSL  
Lat= 42 44 26.0, Lng= 106 21 34.0  
Central Wyoming College BPET19960624KT 4  
Fac ID# 82575  
Dist.=175.68 km, Azi=335.1°, Rev Azi=154.5°

Direct line HAAT Grade B, 47 dBu= 20.22 km & Grade A= 5.84 km

Distance from reference to Grade B = 155.46 km

Cutoff Dist from Full Service or Class CA= 196

Maximum Co-located power= 26.3 kW

KPTW Signal Contour at Reference location = -11.0 dBu

CH. 211, U/D ratio = 26.3 dB, Maximum FM signal = 73.3 dBu , 6 dB credit added

## TV/FM D to U values

47.0	73.3	55.0	72.3	63.0	73.9	71.0	78.7	79.0	85.0	87.0	91.6
48.0	73.0	56.0	72.4	64.0	74.4	72.0	79.5	80.0	85.8	88.0	92.4
49.0	72.6	57.0	72.5	65.0	74.8	73.0	80.2	81.0	86.6	89.0	93.3
50.0	72.3	58.0	72.6	66.0	75.4	74.0	81.0	82.0	87.4	90.0	94.2
51.0	72.2	59.0	72.8	67.0	76.0	75.0	81.8	83.0	88.2	91.0	94.2
52.0	72.2	60.0	73.0	68.0	76.6	76.0	82.6	84.0	89.0	92.0	94.2
53.0	72.1	61.0	73.3	69.0	77.3	77.0	83.4	85.0	89.9	93.0	94.2
54.0	72.2	62.0	73.5	70.0	78.0	78.0	84.2	86.0	90.7	94.0	94.2