

Daytime Groundwave Allocation Study
In Support of an Application to
Increase Daytime Power
KLVZ, Brighton, Colorado
810 kHz, 10 kW-D/0.43 kW-N, DA-2

To determine the relevant daytime protections and maximum inverse distance field (IDF) toward each protected station for the above-captioned application, a Daytime Groundwave Allocation Study was conducted on 810 kHz and the two first-adjacent channels. No second- or third-adjacent channel stations were identified as being a factor in the daytime groundwave study.

For each co-channel station studied, the 0.5 and 0.025 mV/m contours were calculated using the procedure specified in 47 C.F.R. §73.183. For each first-adjacent channel station studied, the 0.5 and 0.25 mV/m contours were calculated using the same procedure. Conductivity values were determined using 47 C.F.R. §73.190 Figure M3. Where measured conductivity data was found to be available, such measured conductivity data was applied across arcs in accordance with Commission policy.

Figure 1 herein shows the proposed, protected and interfering contours as calculated. From this exhibit, it can be clearly seen that there is no prohibited overlap between any of the proposed KLVZ contours and any other protected or interfering contours. As such, the proposed facility is in compliance with 47 C.F.R. §73.37.

Proposed Daytime Operation
KLVZ • Brighton, Colorado
810 kHz, 10 kW-D, 0.43 W-N, DA-2

The proposed KLVZ daytime groundwave contours were calculated every five degrees from 0E to 355E True using the calculated standard pattern inverse distance field for each azimuth. Ground conductivity values for all azimuths were obtained from §73.190, Figure M3 of the FCC rules. Calculations were made at 15E, 65E, 99.5E and 340.5E using conductivities from the May 2007 KLVZ AM Full/Partial Directional Proof of Performance (augmentation application), at 160E, 220E and 280E from the November 2005 KLVZ AM Directional Proof of Performance, and at 185E, 195E and 205E True using ground conductivities from measurements made in June 2007. The June 2007 measurements are submitted herewith. Measured conductivity data was applied in an arc $\pm 10^\circ$ in accordance with Commission policy, except where that arc would span another measured conductivity. In such cases, the measured conductivity was applied to the midpoint between the measured radials.

KBHB • Sturgis, South Dakota
810 kHz, 25 kW-D, 0.060 kW-N, ND

The licensed daytime 0.5 mV/m and 0.025 mV/m groundwave contours for KBHB shown on Figure 1 herein were calculated every five degrees from 115E to 265E True using an inverse distance field of 1,529.0 mV/m for all azimuths. Ground conductivity values for all azimuths were obtained from §73.190, Figure M3 of the FCC rules except at 195° True, where ground conductivities from measurements made in May 2007 by the applicant by the applicant and filed with an augmentation application (BP-20070516AAI) were used. This measured conductivity was applied in an arc $\pm 10^\circ$ in accordance with Commission policy.

KSWV • Santa Fe, New Mexico
810 kHz, 5 kW-D, 0.01 kW-N, ND

The licensed daytime 0.5 mV/m and 0.025 mV/m contours of KSWV shown on Figure 1 herein were calculated every five degrees from 0E to 355E True using an inverse distance field of 683.7 mV/m for all azimuths. Ground conductivity values for all azimuths were obtained from §73.190, Figure M3 of the FCC rules.

WHB • Kansas City, Missouri
810 kHz, 50 kW-D, 5 kW-N, DA-N

The licensed daytime 0.5 mV/m and 0.025 mV/m contours of WHB shown on Figure 1 herein were calculated every five degrees from 0E to 355E True using an inverse distance field of 2162.2 mV/m for all azimuths. Ground conductivity values for all azimuths were obtained from §73.190, Figure M3 of the FCC rules.

KUTR • Taylorsville, Utah
820 kHz, 50 kW-D, 10 kW-C, 2.5 kW-N, DA-3

The proposed (CP) daytime 0.5 mV/m and 0.25 mV/m contours of KUTR shown on Figure 1 herein were calculated every five degrees from 0E to 355E True using the calculated standard pattern inverse distance field on each azimuth. Ground conductivity values for all azimuths were obtained from §73.190, Figure M3 of the FCC rules.

Exhibit E-15

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Crawford Broadcasting								
Station: KLVZ			810 kHz		40-01-41		104-49-21	
Distances are from Site to Conductivity Breaks								
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
0	20	32.0	8	277.2	15	420.7	8	450.0
5	-10	32.0	8	450.0				
10	-10	32.0	8	323.9	15	354.9	8	450.0
15	-10	32.0	8	319.0	15	372.4	8	450.0
20	-10	32.0	8	321.9	15	450.0		
25	-10	32.0	8	333.3	15	371.6	8	450.0
30	8	364.3	4	373.1	8	450.0		
35	8	289.6	4	418.1	8	450.0		
40	8	252.2	4	450.5				
45	8	240.0	4	450.0				
50	20	35.2	8	249.8	4	450.0		
55	-20	35.2	8	263.2	4	450.0		
60	-20	35.2	8	283.3	4	450.0		
65	-20	35.2	8	176.3	15	312.8	4	452.2
	30	0.0						
70	-20	35.2	8	147.3	15	358.9	30	450.0
75	-20	35.2	8	132.3	15	348.7	30	450.0
80	8	117.8	15	344.8	30	450.0		
85	15	38.0	8	102.4	15	343.5	30	450.0
90	15	344.8	30	450.0				
95	15	348.8	30	450.0				
100	15	355.6	30	450.0				
105	15	365.5	30	450.0				
110	15	380.4	30	450.0				
115	8	5.7	15	412.1	30	450.0		
120	8	5.1	15	450.0				
125	8	4.6	15	452.0				
130	8	4.3	15	441.4	30	450.0		
135	8	4.0	15	436.6	30	450.0		
140	8	3.8	15	442.2	30	450.0		
145	8	3.6	15	450.0				
150	-30	32.4	15	500.4	30	600.0		
155	-30	32.4	15	546.8	30	600.0		
160	-30	32.4	15	596.6	30	600.0		
165	-30	32.4	15	600.0				
170	-30	32.4	15	600.0				
175	-2	128.0	15	450.0				
180	-2	128.0	15	278.4	2	375.7	15	450.0
185	-2	128.0	15	222.4	8	264.4	2	450.0
190	-3	125.0	15	192.5	8	259.0	2	307.4
	4	344.6	2	450.0				
195	-3	125.0	15	162.5	8	235.1	4	347.8
	2	399.5	4	450.0				
200	-3	125.0	15	132.4	8	220.5	4	330.3
	2	381.0	4	450.0				

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Crawford Broadcasting								
Station: KLVZ			810 kHz		40-01-41		104-49-21	
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
205	-2	126.0	8	209.8	4	308.6	2	367.7
	4	450.0						
210	-2	126.0	8	199.2	2	356.8	4	450.0
215	-2	126.0	8	188.6	2	357.9	4	450.0
220	-40	31.8	15	94.9	8	177.0	2	366.2
	4	450.0						
225	-40	31.8	15	93.4	8	162.8	2	356.3
	4	450.0						
230	-40	31.8	15	92.7	8	148.5	2	328.8
	4	450.0						
235	8	8.1	15	92.6	8	137.6	2	286.0
	8	301.3	15	342.6	4	450.0		
240	8	10.1	15	89.6	8	130.8	2	251.9
	8	305.0	15	360.6	4	450.0		
245	8	13.5	15	80.0	8	125.5	2	247.4
	8	300.5	15	380.0	4	450.0		
250	8	121.5	2	247.5	8	307.2	15	450.0
255	8	118.6	2	249.4	8	322.8	15	450.0
260	8	116.8	2	250.3	8	409.3	4	450.0
265	8	115.8	2	245.7	8	410.8	4	450.0
270	-30	31.6	8	115.8	2	235.2	8	392.8
	15	436.6	4	450.0				
275	-30	31.6	8	116.1	2	225.0	8	374.6
	15	450.0						
280	-30	31.6	8	117.3	2	218.5	8	364.3
	2	450.0						
285	-30	31.6	8	119.4	2	215.4	8	272.6
	15	339.3	2	453.5	8	0.0	8	561.6
	4	618.5	15	0.0				
290	-30	31.6	8	119.4	2	220.1	8	263.1
	15	369.9	8	450.0				
295	8	120.3	2	239.1	8	256.3	15	383.0
	8	447.5	15	450.0				
300	8	122.2	2	251.5	15	450.0		
305	8	124.9	2	248.6	15	450.0		
310	8	128.4	2	247.3	15	415.7	2	450.0
315	8	133.2	2	246.6	15	450.0		
320	8	136.0	15	140.7	2	244.4	15	450.0
325	15	38.0	8	128.5	15	160.7	2	236.8
	15	450.0						
330	-15	27.0	8	125.7	15	426.6	8	450.0
335	-15	27.0	8	130.1	15	413.4	8	450.0
340	-15	27.0	8	160.9	15	443.0	8	450.0
345	-15	27.0	8	231.4	15	450.0		
350	-15	27.0	8	275.9	15	487.2	8	0.0
355	8	273.4	15	449.7	8	450.0		

Negative mS/m are MEASURED Conductivity Values

Exhibit E-15

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Crawford Broadcasting								
Station: KBHB			810 kHz		44-25-24		103-25-37	
Distances are from Site to Conductivity Breaks								
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
0	15	72.5	8	382.0	30	450.0		
5	15	70.1	8	366.6	30	450.0		
10	15	68.6	8	348.1	30	450.0		
15	15	67.8	8	330.2	30	450.0		
20	15	67.5	8	315.4	30	450.0		
25	15	67.6	8	304.2	30	450.0		
30	15	68.4	8	295.9	30	450.0		
35	15	69.6	8	290.2	30	450.0		
40	15	71.5	8	286.8	30	450.0		
45	15	74.7	8	283.6	30	450.0		
50	15	80.4	8	281.8	30	450.0		
55	15	87.7	8	279.9	30	450.0		
60	15	97.4	8	230.0	15	273.6	30	450.0
65	15	110.4	8	188.2	15	265.3	30	447.2
	15	450.0						
70	15	128.7	8	175.8	15	257.9	30	436.2
	15	450.0						
75	15	249.7	30	434.7	15	450.0		
80	15	239.4	30	425.2	15	450.0		
85	15	234.8	30	419.7	15	450.0		
90	15	243.7	30	445.3	15	450.0		
95	15	330.1	30	483.5				
100	15	330.8	30	450.0				
105	15	340.2	30	450.0				
110	15	121.6	8	145.9	15	424.9	30	450.0
115	15	103.8	8	223.5	15	284.0	8	337.3
	15	396.3	8	450.0				
120	15	96.5	8	465.1				
125	15	92.9	8	347.0	4	450.0		
130	15	90.5	8	226.6	4	443.0	30	450.0
135	15	89.0	8	207.6	4	421.9	30	450.0
140	15	88.4	8	192.9	4	418.1	30	450.0
145	15	90.3	8	185.2	4	420.3	30	450.0
150	15	93.0	8	181.5	4	422.8	15	438.7
	30	450.0						
155	15	100.6	8	181.3	4	395.8	15	450.0
160	15	114.7	8	173.9	15	182.3	8	213.3
	4	370.2	8	384.4	15	450.0		
165	15	137.2	8	155.3	15	184.4	8	234.5
	4	347.2	8	395.6	15	450.0		
170	15	49.8	8	57.7	15	187.1	8	276.2
	4	325.6	8	403.9	15	450.0		
175	15	31.5	8	87.8	15	189.3	8	420.0
	15	450.0						
180	15	24.0	8	108.5	15	186.6	8	450.0

Exhibit E-15

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Crawford Broadcasting								
Station: KBHB			810 kHz		44-25-24		103-25-37	
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
185	-2	98.5	8	126.6	15	183.7	8	450.0
190	-2	98.5	8	132.0	15	182.3	8	450.0
195	-2	98.5	8	138.3	15	181.5	8	450.0
200	-2	98.5	8	146.3	15	177.1	8	450.0
205	-2	98.5	8	450.0				
210	15	15.4	8	169.7	15	246.5	8	343.8
	15	415.3	2	450.0				
215	15	14.8	8	143.0	15	260.1	8	308.2
	15	389.9	2	450.0				
220	15	14.4	8	130.7	15	381.0	2	450.0
225	15	14.2	8	124.5	15	450.0		
230	15	14.0	8	123.4	15	450.0		
235	15	14.0	8	125.7	15	450.0		
240	15	14.0	8	130.5	15	450.0		
245	15	14.2	8	136.2	15	450.0		
250	15	14.5	8	143.7	15	300.6	8	337.4
	15	450.0						
255	15	14.9	8	153.3	15	274.4	8	391.9
	15	450.0						
260	15	15.5	8	165.6	15	263.0	8	450.0
265	15	16.2	8	181.6	15	261.1	8	450.0
270	15	17.2	8	202.6	15	253.2	8	450.0
275	15	18.4	8	450.0				
280	15	20.0	8	450.0				
285	15	22.8	8	450.0				
290	15	27.3	8	115.4	15	148.5	8	450.0
295	15	34.4	8	108.0	15	151.6	8	450.0
300	15	46.9	8	103.0	15	153.0	8	450.0
305	15	82.3	8	95.0	15	154.6	8	450.0
310	15	156.3	8	450.0				
315	15	158.5	8	450.0				
320	15	160.5	8	450.0				
325	15	157.5	8	452.3				
330	15	124.4	8	439.6	15	450.0		
335	15	103.2	8	434.6	15	450.0		
340	15	93.6	8	428.6	15	450.0		
345	15	86.2	8	423.6	30	450.0		
350	15	80.5	8	418.1	30	450.0		
355	15	76.0	8	401.3	30	450.0		

Exhibit E-15

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Crawford Broadcasting								
Station: KSWV			810 kHz		35-42-05		105-57-58	
Distances are from Site to Conductivity Breaks								
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
0	4	91.2	2	154.2	4	282.0	2	306.2
	8	450.0						
5	4	75.9	2	143.0	4	273.9	8	410.4
	15	456.6						
10	4	60.2	2	138.5	4	249.3	8	329.7
	15	450.0						
15	4	47.3	2	142.4	4	183.9	2	229.3
	8	284.0						
20	4	39.3	2	230.1	8	257.7	15	450.0
	4	32.9						
25	4	32.9	2	231.8	15	450.0		
30	4	26.7	2	215.6	15	450.0		
35	4	22.7	2	203.8	15	450.0		
40	4	19.8	2	191.5	15	450.0		
45	4	17.7	2	133.0	15	450.0		
50	4	16.1	2	106.1	15	450.0		
55	4	14.4	2	95.7	15	450.0		
60	4	13.0	2	87.7	15	450.0		
65	4	11.9	2	81.6	15	450.0		
70	4	11.1	2	76.8	15	406.7	30	450.0
75	4	10.4	2	73.0	15	377.5	30	450.0
80	4	9.9	2	70.2	15	361.6	30	450.0
85	4	9.5	2	68.0	15	349.0	30	450.0
90	4	9.2	2	66.4	15	338.4	30	450.0
95	4	9.0	2	65.4	15	330.0	30	450.0
100	4	8.9	2	65.0	15	322.3	30	450.0
105	4	8.8	2	64.8	15	317.3	30	450.0
110	4	8.8	2	64.7	15	317.7	30	450.0
115	4	8.9	2	65.1	15	321.6	30	385.9
	15	450.0						
120	4	9.0	2	66.0	15	450.0		
125	4	9.0	2	66.3	15	104.9	8	130.4
	15	450.0						
130	4	8.9	2	65.2	15	101.6	8	171.4
	15	450.0						
135	4	9.0	2	60.1	15	102.9	8	194.2
	15	450.0						
140	4	9.1	2	45.4	15	107.5	8	207.7
	15	485.9						
145	4	9.3	2	25.7	15	113.5	8	228.7
	15	388.6						
150	4	9.6	2	18.0	15	122.4	8	267.2
	15	338.4						
155	4	9.9	2	13.9	15	133.8	8	290.7
	15	303.8						
160	4	10.4	2	11.4	15	148.8	8	271.4
	4	308.5						

Exhibit E-15

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Crawford Broadcasting								
Station: KSWV			810 kHz		35-42-05		105-57-58	
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
165	4	9.9	15	169.1	8	243.7	4	325.3
	8	450.0						
170	4	8.8	15	197.6	8	218.9	4	346.0
	8	450.0						
175	4	8.0	15	223.2	4	370.0	8	450.0
180	4	7.3	15	225.3	4	400.9	8	450.0
185	4	6.8	15	228.0	4	423.7	8	442.4
	4	450.0						
190	4	6.5	15	232.7	4	450.0		
195	4	6.2	15	239.1	4	450.0		
200	4	5.9	15	247.4	4	450.0		
205	4	5.8	15	258.3	4	450.0		
210	4	5.7	15	272.5	4	450.0		
215	4	5.6	15	269.4	8	309.4	4	383.8
	8	450.0						
220	4	5.6	15	235.3	8	332.6	4	419.7
	8	450.0						
225	4	5.6	15	210.8	8	327.4	4	417.7
	8	450.0						
230	4	5.6	15	193.2	8	285.2	4	413.6
	8	450.0						
235	4	5.7	15	180.6	8	295.4	4	413.9
	8	450.0						
240	4	5.9	15	170.8	8	303.5	4	414.6
	8	450.0						
245	4	6.1	15	163.5	8	310.6	4	311.1
	15	347.1	4	412.7	8	450.0		
250	4	6.4	15	160.0	8	312.3	15	398.9
	4	401.8	8	450.0				
255	4	6.7	15	157.8	8	314.6	15	431.3
	8	450.0						
260	4	7.2	15	158.3	8	318.6	15	450.0
265	4	7.8	15	164.5	8	324.1	15	367.9
	8	389.2	15	450.0				
270	4	8.6	15	187.3	8	334.4	15	352.0
	8	404.1	15	450.0				
275	4	9.6	15	221.0	8	420.3	15	450.0
280	4	10.9	15	243.9	8	441.5	15	450.0
285	4	12.9	15	268.5	8	465.9		
290	4	15.8	15	310.8	8	450.0		
295	4	20.7	15	450.0				
300	4	30.3	15	113.8	4	126.1	15	450.0
305	4	330.4	15	363.7	4	414.8	15	450.0
310	4	425.3	15	450.0				
315	4	432.2	15	450.0				
320	4	430.3	15	450.0				

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Crawford Broadcasting								
Station: KSWV			810 kHz		35-42-05		105-57-58	
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
325	4	248.8	2	254.1	4	354.1	15	450.0
330	4	213.6	2	303.6	4	326.1	15	450.0
335	4	188.9	2	335.7	8	450.0		
340	4	151.9	2	356.9	8	450.0		
345	4	128.8	2	450.0				
350	4	115.6	2	450.0				
355	4	105.5	2	173.1	4	252.6	2	450.0

Exhibit E-15

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Crawford Broadcasting								
Station: WHB			810 kHz		39-18-21		94-34-30	
Distances are from Site to Conductivity Breaks								
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
0	15	386.9	30	530.1	8	602.4	4	800.0
5	15	406.7	30	511.8	15	539.6	8	552.2
	15	579.3	4	800.0				
10	15	602.9	4	749.1	8	800.0		
15	15	566.9	8	602.4	4	795.9	8	800.0
20	15	467.3	8	626.5	4	800.0		
25	15	396.9	8	553.2	4	800.0		
30	15	390.8	8	483.0	4	800.0		
35	15	380.3	8	461.7	4	800.0		
40	15	330.1	8	468.5	4	593.2	8	800.0
45	15	309.1	8	711.5	15	793.1	8	800.0
50	15	307.9	8	687.3	15	706.7	8	800.0
55	15	321.7	8	644.1	15	676.3	8	800.0
60	15	334.1	8	788.3	2	800.0		
65	15	341.3	8	558.8	15	631.6	8	710.4
	2	800.0						
70	15	341.2	8	467.5	15	586.0	8	800.0
75	15	309.6	8	405.7	15	550.5	8	782.7
	15	800.0						
80	15	245.5	8	379.0	15	528.9	8	701.9
	15	800.0						
85	15	233.7	8	358.4	15	510.7	8	800.0
90	15	223.6	8	344.8	15	492.4	8	800.0
95	15	212.9	8	334.6	15	471.6	8	736.9
	4	756.0	8	800.0				
100	15	202.5	8	330.4	15	451.5	8	709.1
	4	800.0						
105	15	192.4	8	339.9	15	432.6	8	701.7
	4	800.0						
110	15	183.7	8	684.4	4	800.0		
115	15	176.1	8	543.9	4	595.3	8	642.1
	4	800.0						
120	15	170.4	8	553.0	4	800.0		
125	15	166.2	8	576.9	4	800.0		
130	15	163.5	8	623.5	4	800.0		
135	15	162.0	8	722.6	4	760.2	2	800.0
140	15	161.9	8	769.3	2	800.0		
145	15	162.9	8	816.7				
150	15	166.6	8	800.0				
155	15	174.7	8	519.9	4	668.1	8	800.0
160	15	185.9	8	482.9	4	735.3	8	800.0
165	15	201.3	8	454.1	4	800.0		
170	15	221.1	8	431.9	15	493.0	4	698.6
	15	800.0						
175	15	226.0	8	429.6	15	542.0	4	678.5
	8	800.0						

Exhibit E-15

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Crawford Broadcasting								
Station: WHB 810 kHz			39-18-21		94-34-30			
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
180	15	238.3	8	438.6	15	576.7	4	667.0
	8	800.0						
185	15	292.5	8	429.9	15	579.2	4	672.3
	8	800.0						
190	15	618.7	30	784.4	8	800.0		
195	15	650.1	30	800.0				
200	15	230.6	30	324.4	15	405.6	8	432.6
	15	647.9	30	685.4	15	800.0		
205	15	198.0	30	350.3	8	465.0	15	512.2
	30	706.5	15	800.0				
210	15	169.5	30	358.7	8	456.2	15	512.1
	30	767.2	15	800.0				
215	15	148.7	30	526.9	15	685.9	30	800.0
220	15	133.3	30	527.3	15	697.5	30	800.0
225	15	121.7	30	519.3	15	709.7	30	796.0
	15	800.0						
230	15	112.7	30	516.1	15	711.3	30	800.0
235	15	105.0	30	519.8	15	587.4	30	800.0
240	15	98.2	30	533.6	15	559.6	30	800.0
245	15	92.8	30	731.5	15	800.0		
250	15	88.3	30	650.0	15	800.0		
255	15	83.8	30	523.2	15	800.0		
260	15	80.3	30	526.1	15	800.0		
265	15	77.6	30	531.8	15	800.0		
270	15	75.7	30	243.4	15	301.7	30	531.1
	15	800.0						
275	15	74.4	30	203.7	15	337.4	30	531.9
	15	800.0						
280	15	73.5	30	178.6	15	341.8	30	536.8
	15	769.0	8	800.0				
285	15	73.1	30	160.0	15	344.8	30	546.0
	15	724.7	8	800.0				
290	15	73.3	30	147.5	15	350.5	30	559.7
	15	655.0	8	800.0				
295	15	74.0	30	140.4	15	359.8	30	553.3
	4	756.5	8	800.0				
300	15	75.3	30	136.0	15	296.9	30	339.5
	15	373.9	30	528.5	4	761.8	8	800.0
305	15	76.9	30	136.7	15	242.4	30	341.6
	15	393.3	30	497.7	4	764.4	8	800.0
310	15	79.3	30	140.1	15	230.0	30	335.0
	15	420.3	30	423.9	4	656.1	8	800.0
315	15	82.5	30	147.3	15	220.6	30	324.1
	15	416.6	4	469.0	8	644.4	15	800.0
320	15	86.6	30	156.7	15	216.5	30	300.5
	15	465.2	8	504.2	15	800.0		

Exhibit E-15
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Crawford Broadcasting								
Station: WHB 810 kHz			39-18-21		94-34-30			
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
325	15	92.0	30	171.5	15	474.8	30	660.5
	15	661.5	30	791.9	15	800.0		
330	15	98.2	30	189.1	15	458.4	30	800.0
335	15	106.1	30	204.0	15	426.6	30	613.5
	15	673.2	30	800.0				
340	15	116.3	30	211.0	15	447.0	30	454.0
	15	805.8						
345	15	129.9	30	209.5	15	796.9	30	800.0
350	15	152.2	30	192.1	15	448.0	30	521.9
	15	712.0	30	800.0				
355	15	393.2	30	553.0	8	625.1	4	800.0

Exhibit E-15

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Crawford Broadcasting								
Station: KUTR			820 kHz		40-19-46		112-04-11	
Distances are from Site to Conductivity Breaks								
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
0	15	129.0	8	453.2				
5	15	101.0	4	114.2	8	449.4	4	450.0
10	15	80.0	4	117.0	8	411.9	4	450.0
15	15	66.7	4	120.9	8	326.7	2	438.2
	4	450.0						
20	15	57.5	4	127.3	8	308.0	2	450.0
25	15	50.9	4	137.9	8	309.9	15	340.3
	2	450.0						
30	15	46.5	4	127.8	8	276.4	15	346.7
	2	458.7						
35	15	43.2	4	112.3	8	248.8	15	340.2
	2	414.9	15	419.6	8	450.0		
40	15	40.6	4	102.3	2	108.3	8	178.2
	15	336.7	2	393.8	15	454.9		
45	15	38.6	4	96.0	2	115.4	8	154.7
	15	336.5	2	388.8	15	450.0		
50	15	37.1	4	91.9	2	124.4	8	141.3
	15	360.9	2	379.4	15	450.0		
55	15	35.9	4	89.7	2	135.3	15	231.8
	8	273.1	15	450.0				
60	15	35.1	4	88.3	2	149.4	15	199.3
	8	293.8	15	450.0				
65	15	34.5	4	87.6	2	171.9	15	183.9
	8	283.5	15	450.0				
70	15	34.3	4	87.5	2	218.4	8	274.8
	15	450.0						
75	15	34.2	4	89.0	2	278.3	15	407.7
	2	450.0						
80	15	34.5	4	91.5	2	289.9	15	370.8
	8	402.2	2	450.0				
85	15	35.0	4	94.9	2	124.0	15	250.4
	8	312.8	15	341.6	8	406.6	2	450.0
90	15	35.9	4	87.8	15	244.3	8	395.1
	2	450.0						
95	15	37.1	4	72.7	15	237.0	8	381.1
	2	450.0						
100	15	39.0	4	68.6	15	229.1	8	379.3
	2	450.0						
105	15	41.4	4	70.7	15	97.4	4	201.4
	15	216.8	8	401.7	2	450.0		
110	15	44.5	4	225.3	8	289.6	15	323.7
	8	435.0	2	450.0				
115	15	48.6	4	241.1	8	268.3	15	399.1
	8	441.0	2	450.0				
120	15	53.8	4	256.8	8	261.0	15	436.3
	2	450.0						

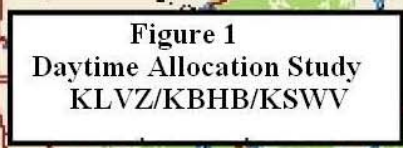
Exhibit E-15

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Crawford Broadcasting								
Station: KUTR			820 kHz		40-19-46		112-04-11	
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
125	15	59.4	4	122.5	15	178.8	4	253.7
	15	320.9	4	469.7				
130	15	66.6	4	110.6	8	119.1	15	211.0
	4	221.2	15	305.3	4	450.0		
135	15	76.5	4	102.4	8	129.1	15	311.9
	4	450.0						
140	15	88.5	4	96.1	8	137.5	15	321.6
	4	426.6	15	450.0				
145	15	91.6	8	146.8	15	450.0		
150	15	88.6	8	155.0	15	445.1	8	450.0
155	15	87.4	8	164.9	15	248.9	8	314.2
	15	390.8	8	450.0				
160	15	88.1	8	180.2	15	236.4	8	316.1
	15	374.4	8	450.0				
165	15	90.7	8	320.1	15	380.9	8	450.0
170	15	94.9	8	334.3	15	450.0		
175	15	101.3	8	307.9	30	355.8	15	450.0
180	15	114.4	8	281.4	30	347.7	8	450.0
185	15	132.5	8	259.4	30	362.7	8	450.0
190	15	158.9	8	236.2	15	250.2	30	379.7
	8	450.0						
195	15	276.7	30	360.9	8	450.0		
200	15	450.0						
205	15	450.0						
210	15	450.0						
215	15	450.0						
220	15	303.3	4	450.0				
225	15	274.0	4	450.0				
230	15	252.8	4	450.0				
235	15	235.8	4	450.0				
240	15	219.1	4	450.0				
245	15	198.8	4	450.0				
250	15	162.4	4	450.0				
255	15	130.8	4	450.0				
260	15	112.7	8	129.9	4	450.0		
265	15	101.8	8	140.8	4	450.0		
270	15	96.0	8	150.6	4	450.0		
275	15	93.1	8	162.4	4	450.0		
280	15	91.8	8	174.3	4	450.0		
285	15	91.3	8	188.8	4	432.5	8	450.0
290	15	92.6	8	205.8	4	458.7		
295	15	94.7	8	228.1	4	450.0		
300	15	97.7	8	257.4	4	450.0		
305	15	101.9	8	297.3	4	450.0		
310	15	108.8	8	340.9	4	450.0		
315	15	117.6	8	343.8	4	450.0		

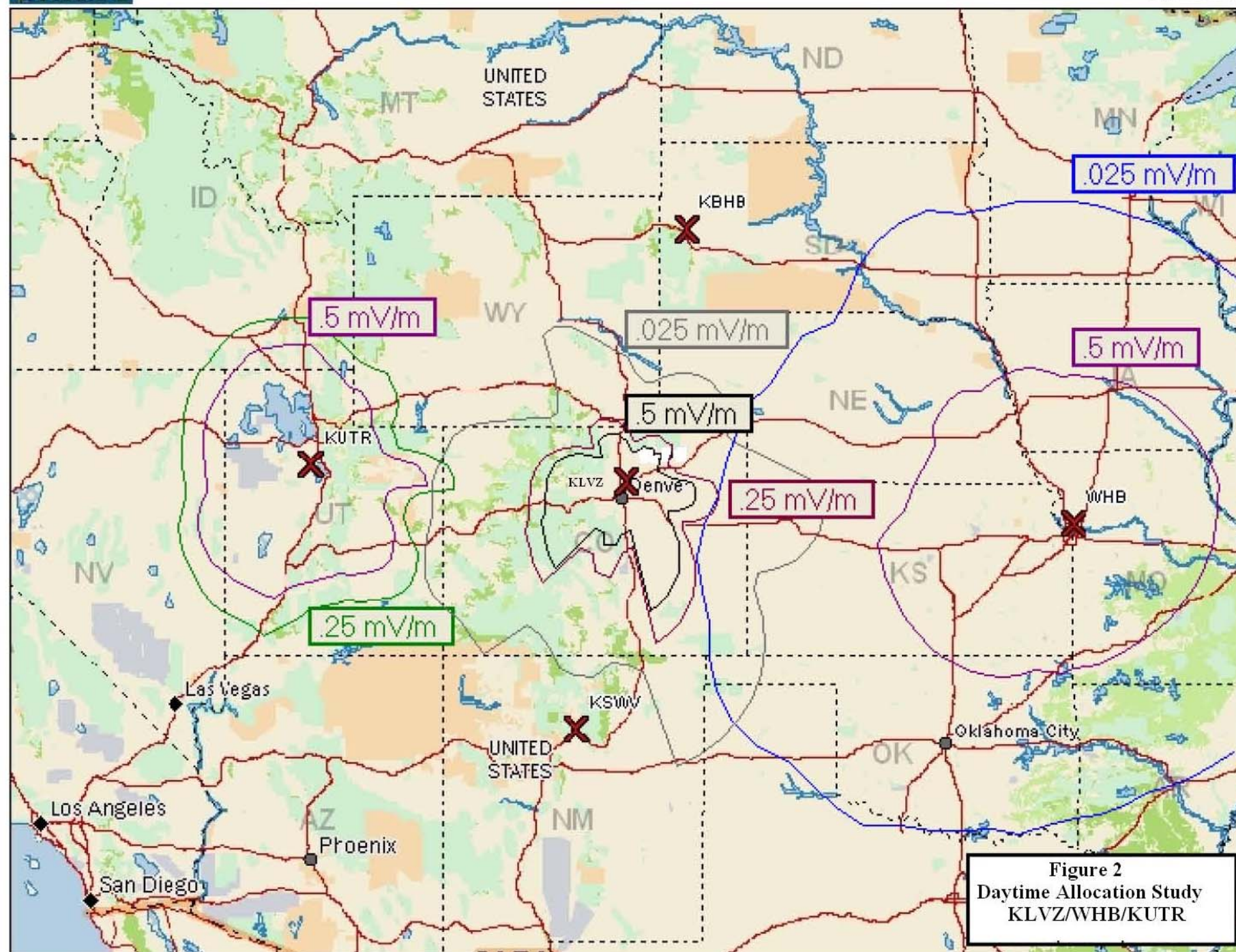
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Crawford Broadcasting								
Station: KUTR			820 kHz		40-19-46		112-04-11	
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
320	15	130.3	8	348.0	4	425.7	8	450.0
325	15	147.8	8	450.0				
330	15	169.9	8	478.6				
335	15	170.0	8	440.6	4	450.0		
340	15	157.0	8	409.9	4	450.0		
345	15	147.1	8	389.3	4	450.0		
350	15	138.5	8	398.2	4	450.0		
355	15	132.7	8	425.1	4	450.0		



MN (9.3° E)

Data Zoom 3-5



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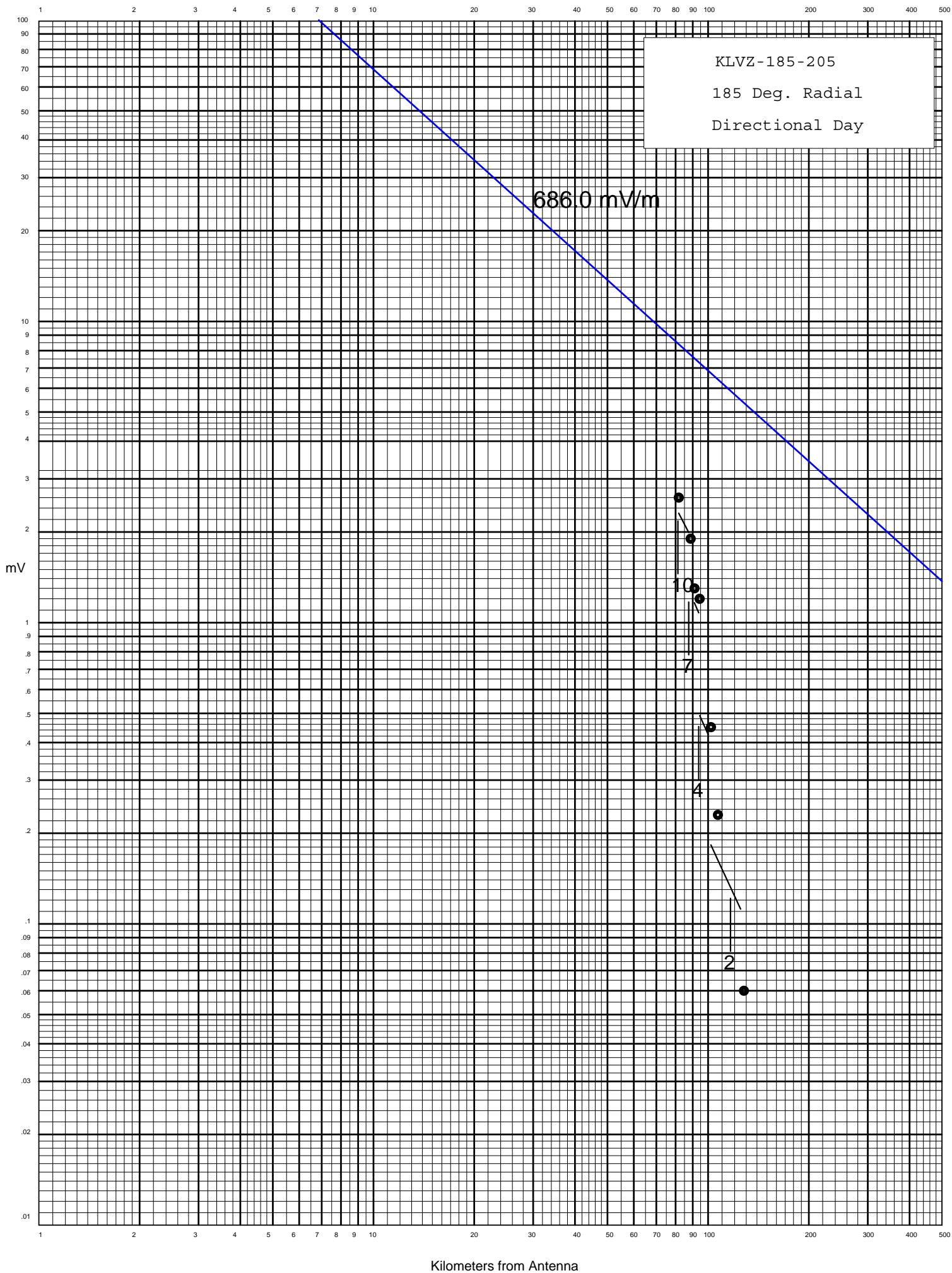
MN (9.3° E)



Data Zoom 3-5

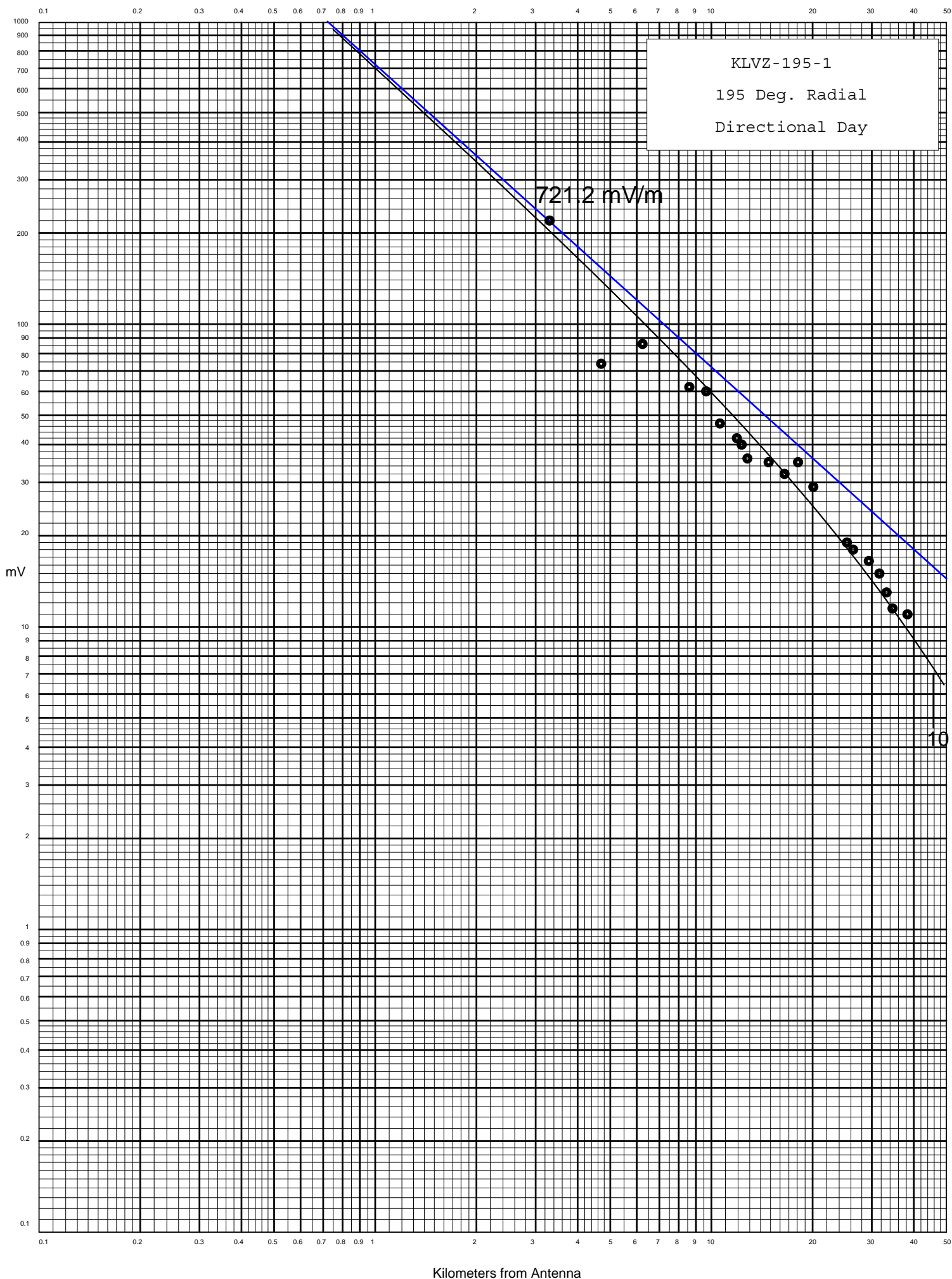
POINT	DIST (km)	N-DA (mV/m)	DA-D (mV/m)	DATE	TIME	LOG RATIO
1	81.7		2.6	6/25/2005	1046	
2	88.7		1.9	6/25/2005	1059	
3	91.1		1.3	6/25/2005	1108	
4	94.4		1.2	6/25/2005	1112	
5	102.0		0.45	6/25/2005	1121	
6	107.0		0.23	6/25/2005	1154	
7	128.0		0.06	6/25/2005	1301	

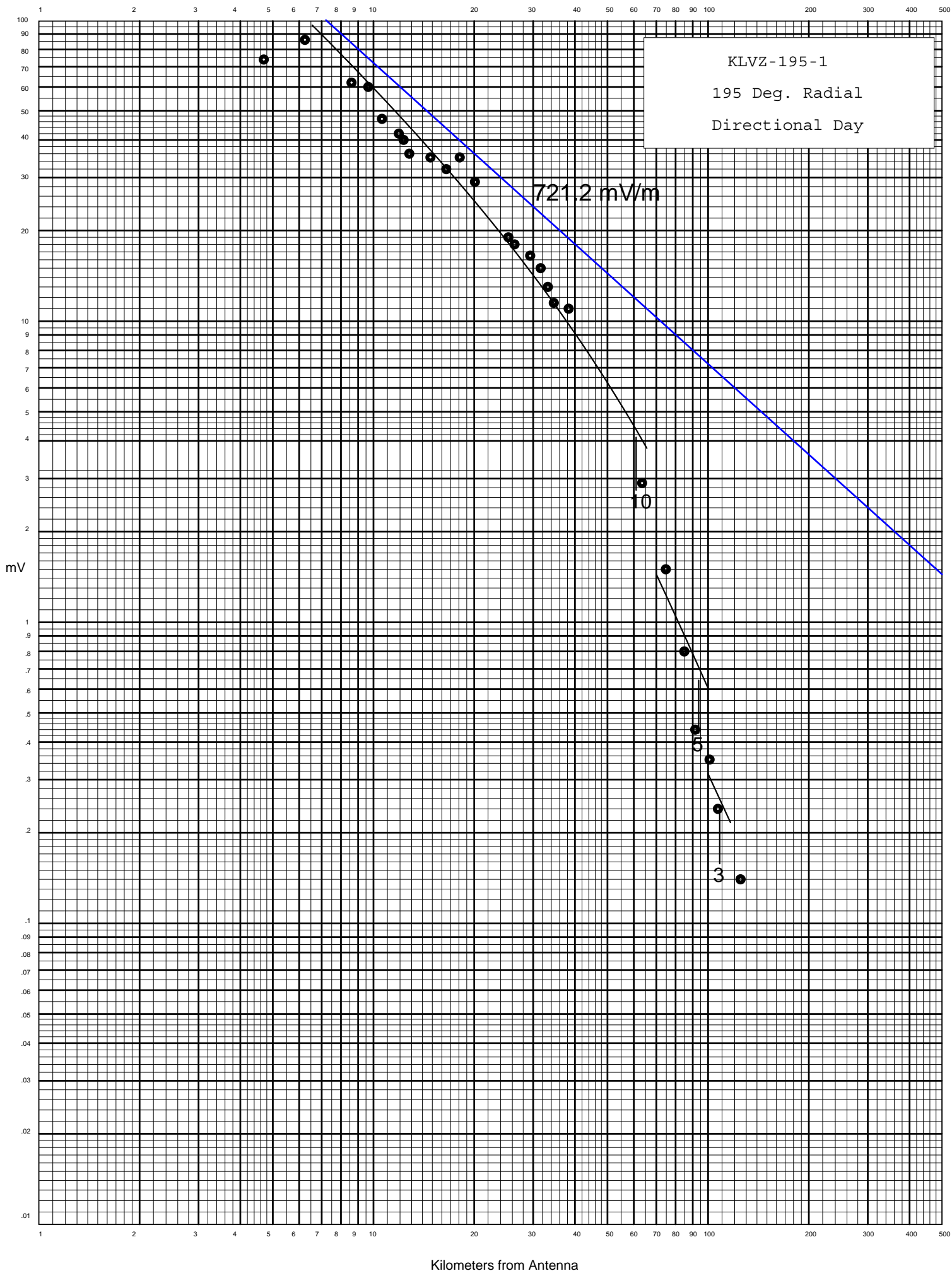
RADIAL AVERAGE:	1.000
RADIAL IDF:	686.0



POINT	DIST (km)	N-DA (mV/m)	DA-D (mV/m)	DATE	TIME	LOG RATIO
1	3.3		220.0	6/18/2007	1024	
2	4.7		74.0	6/18/2007	1027	
3	6.24		86.0	6/18/2007	1036	
4	8.6		62.0	6/18/2007	1049	
5	9.65		60.0	6/18/2007	1052	
6	10.6		47.0	6/18/2007	1054	
7	11.9		42.0	6/18/2007	1057	
8	12.3		40.0	6/18/2007	1100	
9	12.8		36.0	6/18/2007	1102	
10	14.8		35.0	6/18/2007	1106	
11	16.5		32.0	6/18/2007	1117	
12	18.1		35.0	6/18/2007	1126	
13	20.1		29.0	6/18/2007	1131	
14	25.3		19.0	6/18/2007	1142	
15	26.4		18.0	6/18/2007	1146	
16	29.4		16.5	6/18/2007	1155	
17	31.6		15.0	6/18/2007	1201	
18	33.2		13.0	6/18/2007	1210	
19	34.6		11.5	6/18/2007	1221	
20	38.3		11.0	6/18/2007	1231	
21	63.5		2.9	6/18/2007	1345	
22	74.8		1.5	6/18/2007	1400	
23	84.9		0.8	6/18/2007	1453	
24	91.5		0.44	6/18/2007	1625	
25	101.0		0.35	6/18/2007	1701	
26	107.0		0.24	6/18/2007	1730	
27	125.0		0.14	6/18/2007	1759	

RADIAL AVERAGE:	1.000
RADIAL IDF:	721.2





POINT	DIST (km)	N-DA (mV/m)	DA-D (mV/m)	DATE	TIME	LOG RATIO
1	82.5		0.72	6/25/2007	1712	
2	85.1		0.62	6/25/2007	1704	
3	89.2		0.62	6/25/2007	1656	
4	90.8		0.39	6/25/2007	1651	
5	98.2		0.36	6/25/2007	1630	
6	99.2		0.38	6/25/2007	1618	
7	118.0		0.19	6/25/2007	1419	
8	123.0		0.13	6/25/2007	1342	
9	126.0		0.22	6/25/2007	1401	
RADIAL AVERAGE:						1.000
RADIAL IDF:						766.4

