

INDEPENDENT BCST CONSULTANTS, INC.
TRUMANSBURG, NEW YORK

NO. OF TOWERS: THREE

POWER: 3500 WATTS

MODE: CRITICAL HOURS

DATE: 03-09-06

TOWER NO.		HEIGHT {DEG} {FT} {M}	FIELD	SPACING {DEG} {FT} {M}	BEARING {DEG T}	PHASING {DEG}
1	*	97.2 225.0 68.6	0.315	0.0 0.0 0.0	0.0	+151.0
2		116.6 270.0 82.3	1.000	72.7 168.4 51.3	55.0	0.0
3	**	84.2 195.0 59.4	0.455	155.0 358.9 109.4	83.0	-176.0
* TOWER No. 1 TOP-LOADED WITH 11.8 DEGREES AT UPPERMOST GUY CABLES FOR A TOTAL ELECTRICAL HEIGHT OF 109.0 DEGREES.						
** TOWER No. 3 TOP-LOADED WITH 24.8 DEGREES AT UPPERMOST GUY CABLES FOR A TOTAL ELECTRICAL HEIGHT OF 109.0 DEGREES.						

THEOR. VECTOR CONSTANT WITH 1 OHM LOSS/TOWER: 865.901 MV/M/KM

THEOR. HORIZ. PLANE RMS WITH 1 OHM LOSS/TOWER: 645.670 MV/M/KM

THEOR. RSS WITH 1 OHM LOSS/TOWER: 989.650 MV/M/KM

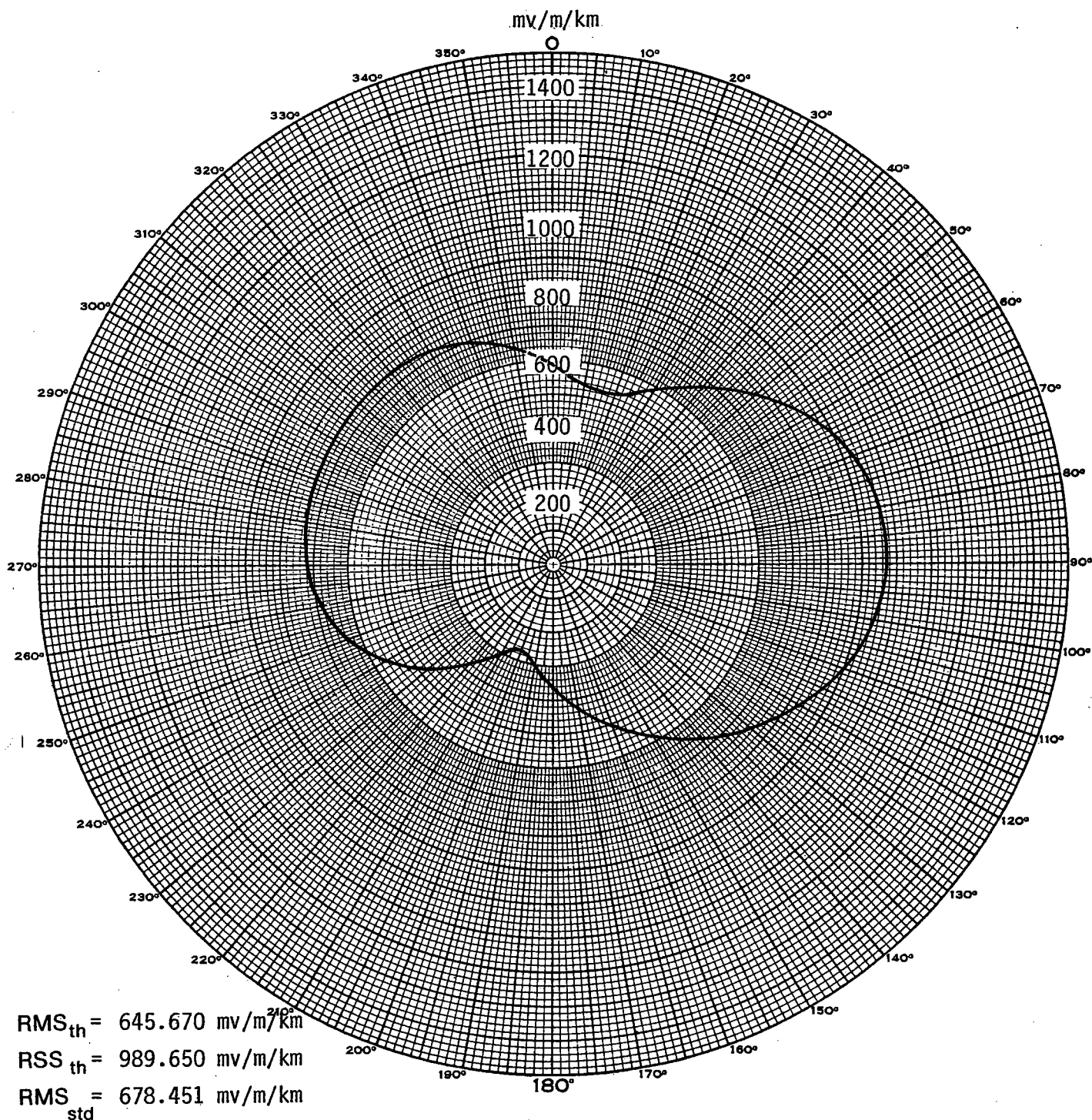
Q: 24.74

RMS OF STANDARD PATTERN: 678.451 MV/M/KM

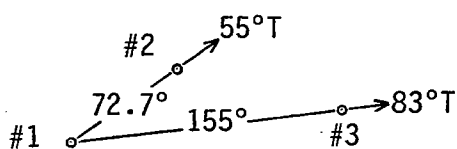
COMPUTED RADIATION VALUES ARE IN TERMS OF MV/M AT ONE KILOMETER.

F.C.C. STANDARD HORIZONTAL PLANE RADIATION

TRUE BEARING DEGREES	FIELD MV/M	TRUE BEARING DEGREES	FIELD MV/M	TRUE BEARING DEGREES	FIELD MV/M	TRUE BEARING DEGREES	FIELD MV/M
.0	585.245	90.0	969.813	180.0	361.732	270.0	717.174
5.0	558.361	95.0	962.138	185.0	328.651	275.0	725.900
10.0	538.442	100.0	947.629	190.0	299.833	280.0	731.458
15.0	529.429	105.0	926.745	195.0	279.087	285.0	734.684
20.0	534.132	110.0	900.063	200.0	270.902	290.0	736.389
25.0	553.262	115.0	868.289	205.0	278.469	295.0	737.270
30.0	585.241	120.0	832.255	210.0	301.672	300.0	737.820
35.0	626.903	125.0	792.911	215.0	337.251	305.0	738.246
40.0	674.504	130.0	751.298	220.0	380.758	310.0	738.416
45.0	724.495	135.0	708.488	225.0	428.110	315.0	737.853
50.0	773.885	140.0	655.507	230.0	476.101	320.0	735.781
55.0	820.331	145.0	623.226	235.0	522.376	325.0	731.231
60.0	862.094	150.0	582.257	240.0	565.274	330.0	723.193
65.0	897.945	155.0	542.874	245.0	603.684	335.0	710.787
70.0	927.065	160.0	504.998	250.0	636.948	340.0	693.458
75.0	948.962	165.0	468.272	255.0	664.778	345.0	671.161
80.0	963.393	170.0	432.246	260.0	687.199	350.0	644.542
85.0	970.309	175.0	396.649	265.0	704.497	355.0	615.092



PROPOSED WPLX CRITICAL HOURS HORIZONTAL PLANE STANDARD PATTERN



Theoretical Specs:
 Twr. Ratio/Phase

#1 0.315/+151.0°

#2 1.000/+0°

#3 0.455/-176.0°

$G_1 = 97.2^\circ + 11.8^\circ \text{ TL}$

$G_2 = 116.6^\circ \text{ (no T.L.)}$

$G_3 = 84.2^\circ + 24.8^\circ \text{ TL}$

STATION	WPLX
LOCATION	Germantown, TN
FREQUENCY	1180 kHz.
POWER	3500 watts
LATITUDE	N 35° 08' 31"
LONGITUDE	W 90° 08' 06"
MODE	Critical Hours
PATTERN	368010-CH-P
DATE	03-09-06

INDEPENDENT BROADCAST CONSULTANTS
 TRUMANSBURG, NEW YORK

WHAM CRITICAL HOURS ANALYSIS

Radio Station WPLX
Germantown, TN

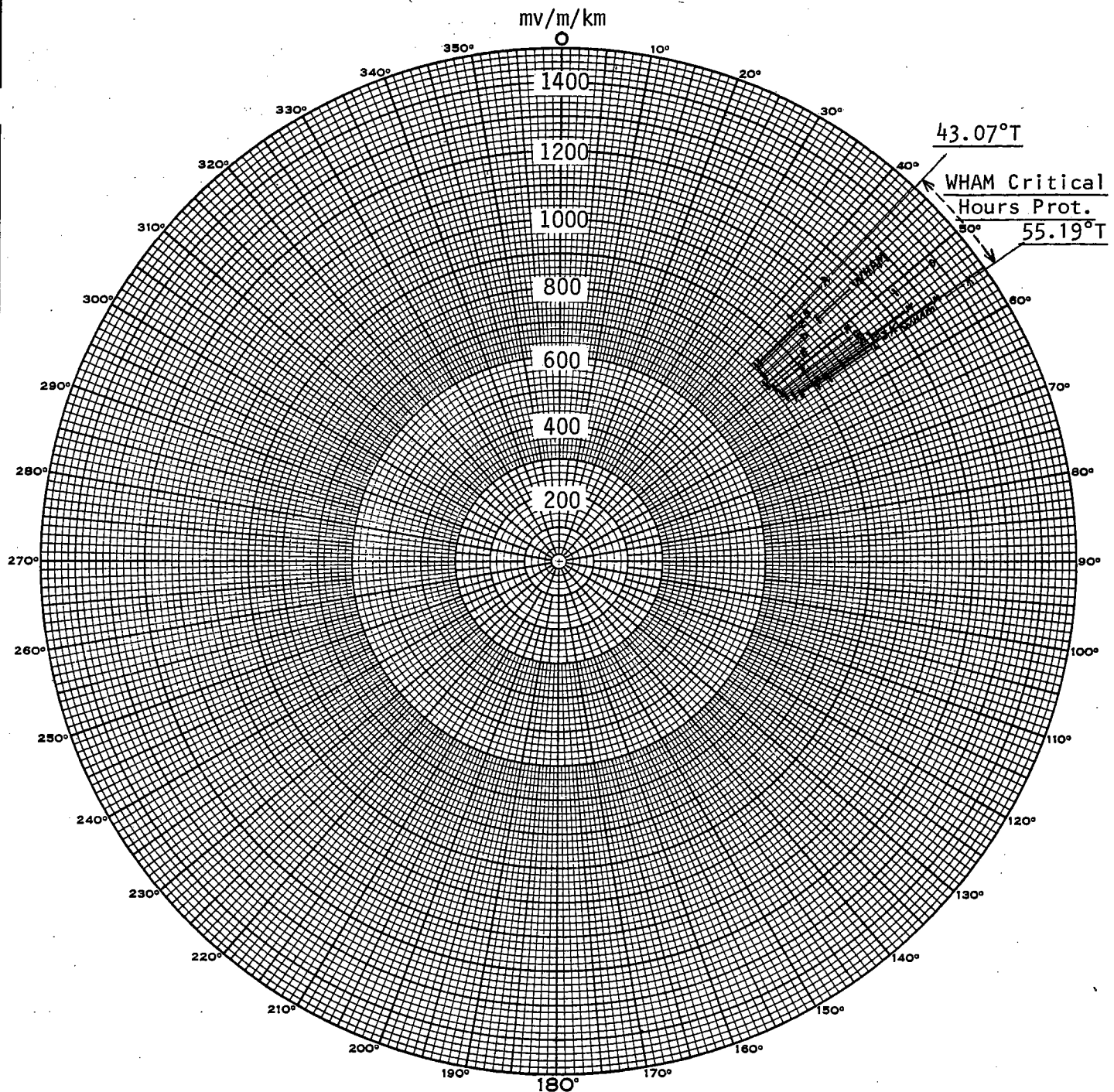
WHAM Contour Point	WHAM 0.1mV/m G'dwave Contour Coordinates	Dist. from WHAM Bear. from WHAM	Dist. from WPLX Bear. from WPLX	Max. Permitted @ 1000 kHz. mV/m/mi	Max. Permitted @ 1600 kHz. mV/m/mi	Max. Allowed @ 1180 kHz. mV/m/km	WPLX Theta Angle	Prop. WPLX Rad. @ Theta mV/m/km
WHAM Site	43-04-55 77-43-30	0.0 km. 0.0 mi. --- °T	1384.96 km. 860.66 mi. 46.69 °T	800 x.700 560.0	280 x.300 84.0	Max: 1036.4 @ 1km. (644.0 @ 1mi.)	0.0° 2.8° 6.7°	741.39 738.86 727.01
A (Border)	43-16-20 79-05-30	112.82 km. 70.10 mi. 281.28 °T	1310.16 km. 814.18 mi. 43.07 °T	756 x.700 529.2	265 x.300 79.5	Max: 979.6 @ 1km. (608.7 @ 1mi.)	0.0° 3.3° 7.4°	705.12 701.80 688.58
B (Shore)	42-04-30 80-19-00	239.91 km. 149.07 mi. 243.06 °T	1148.26 km. 713.57 mi. 44.91 °T	627 x.700 438.9	217 x.300 65.1	Max: 811.1 @ 1km. (504.0 @ 1mi.)	0.0° 4.6° 9.2°	723.59 716.96 697.42
C (240°)	42-01-41 80-07-26	228.76 km. 142.15 mi. 240.00 °T	1156.31 km. 718.57 mi. 45.68 °T	625 x.700 437.5	218 x.300 65.4	Max: 809.3 @ 1km. (502.9 @ 1mi.)	0.0° 4.5° 9.1°	731.31 724.89 705.38
D (230°)	41-50-12 79-41-23	212.46 km. 132.02 mi. 230.00 °T	1173.31 km. 729.13 mi. 47.52 °T	620 x.700 434.0	216 x.300 64.8	Max: 802.7 @ 1km. (498.8 @ 1mi.)	0.0° 4.3° 8.9°	749.62 743.60 724.12
E (220°)	41-37-53 79-20-27	208.90 km. 129.80 mi. 220.01 °T	1183.93 km. 735.73 mi. 49.25 °T	615 x.700 430.5	215 x.300 64.5	Max: 796.6 @ 1km. (495.0 @ 1mi.)	0.0° 4.3° 8.7°	766.61 760.44 741.63
F (210°)	41-27-44 78-58-03	207.07 km. 128.68 mi. 210.00 °T	1199.67 km. 745.51 mi. 50.83 °T	618 x.700 432.6	218 x.300 65.4	Max: 801.5 @ 1km. (498.0 @ 1mi.)	0.0° 4.1° 8.6°	781.85 776.12 756.92
G (200°)	41-19-50 78-34-20	206.85 km. 128.54 mi. 200.00 °T	1220.18 km. 758.26 mi. 52.24 °T	620 x.700 434.0	220 x.300 66.0	Max: 804.7 @ 1km. (500.0 @ 1mi.)	0.0° 4.0° 8.3°	795.17 789.62 771.51

WHAM CRITICAL HOURS ANALYSIS

Radio Station WPLX
Germantown, TN

WHAM Contour Point	WHAM 0.1mV/m G'dwave Contour Coordinates	Dist. from WHAM		Dist. from WPLX Bear. from WPLX	Max. Permitted		Max. Allowed		WPLX Theta Angle	Prop. WPLX Rad. @ Theta mV/m/km
		Bear. from WHAM	Dist. from WHAM		@ 1000 kHz. mV/m/mi	@ 1600 kHz. mV/m/mi	@ 1180 kHz. mV/m/km	@ 1180 kHz. mV/m/km		
H (190°)	41-14-58	206.82 km.	1245.94 km.		622	223	Max: 808.4 @ 1km.		0.0°	806.09
	78-09-17	128.51 mi.	774.27 mi.		x.700	x.300			3.8°	801.00
		190.00 °T	53.42 °T		435.4	66.9	(502.3 @ 1mi.)		8.0°	783.77
I (180°)	41-13-11	207.06 km.	1275.92 km.		630	227	Max: 819.3 @ 1km.		0.0°	814.44
	77-43-30	128.66 mi.	792.90 mi.		x.700	x.300			3.6°	809.82
		180.00 °T	54.34 °T		441.0	58.1	(509.1 @ 1mi.)		7.7°	793.52
J (170°)	41-15-12	206.35 km.	1309.43 km.		660	240	Max: 859.4 @ 1km.		0.0°	819.71
	77-17-47	128.23 mi.	813.72 mi.		x.700	x.300			3.3°	815.81
		170.00 °T	54.93 °T		462.0	72.0	(534.0 @ 1mi.)		7.4°	800.25
K (160°)	41-20-54	204.75 km.	1344.77 km.		695	250	Max: 903.7 @ 1km.		0.0°	822.01
	76-53-10	127.23 mi.	835.69 mi.		x.700	x.300			3.1°	818.56
		160.00 °T	55.19 °T		486.5	75.0	(561.5 @ 1mi.)		7.0°	804.53
L (150°)	41-29-52	202.57 km.	1380.31 km.		730	260	Max: 947.9 @ 1km.		0.0°	821.75
	76-30-33	125.86 mi.	857.77 mi.		x.700	x.300			2.8°	818.93
		150.00 °T	55.16 °T		511.0	78.0	(589.0 @ 1mi.)		6.7°	805.72
M (135°)	41-47-36	200.61 km.	1431.78 km.		770	279	Max: 1002.1 @ 1km.		0.0°	817.66
	76-00-50	124.65 mi.	889.76 mi.		x.700	x.300			2.5°	815.42
		135.00 °T	54.70 °T		539.0	83.7	(622.7 @ 1mi.)		6.2°	803.99
N (120°)	42-09-47	200.00 km.	1479.12 km.		860	308	Max: 1117.5 @ 1km.		0.0°	809.74
	75-37-24	124.28 mi.	919.17 mi.		x.700	x.300			2.2°	808.02
		120.00 °T	53.82 °T		602.0	92.4	(694.4 @ 1mi.)		5.8°	797.88
O (90°)	43-03-20	199.53 km.	1551.76 km.		960	349	Max: 1250.0 @ 1km.		0.0°	783.57
	75-16-07	123.99 mi.	964.31 mi.		x.700	x.300			1.8°	782.46
		90.00 °T	51.01 °T		672.0	104.7	(776.7 @ 1mi.)		5.3°	773.99

FIGURE 14B



CRITICAL HOURS PROTECTION REQUIREMENTS

STATION	WPLX
LOCATION	Germantown, TN
FREQUENCY	1180 kHz.
POWER	---
LATITUDE	N 35° 08' 31"
LONGITUDE	W 90° 08' 06"
MODE	---
PATTERN	---
DATE	03-08-06

INDEPENDENT BROADCAST CONSULTANTS
TRUMANSBURG, NEW YORK

WHAM CLASS A PROTECTED DAYTIME SERVICE CONTOUR

Callsign : WHAM
 Coordinates : 43-04-55.0 N, 77-43-30.0 W
 Comments :
 Frequency (KHz): 1180
 Power (w): 50000.000
 Pattern : LU
 Efficiency : 2662.893 mV/m
 Desc : ND1
 City/State : ROCHESTER, NY
 ARN :
 Licensee : CITICASTERS LICENSES, L.P.

Tower	Field	Phase	Spcng	Ornt	Hght	TopLd
1	1.000	0.0	0.0	0.0	177.1	0.0

Field	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m
0	2662.893	75	2662.893	150	2662.893	225	2662.893	300	2662.893	
5	2662.893	80	2662.893	155	2662.893	230	2662.893	305	2662.893	
10	2662.893	85	2662.893	160	2662.893	235	2662.893	310	2662.893	
15	2662.893	90	2662.893	165	2662.893	240	2662.893	315	2662.893	
20	2662.893	95	2662.893	170	2662.893	245	2662.893	320	2662.893	
25	2662.893	100	2662.893	175	2662.893	250	2662.893	325	2662.893	
30	2662.893	105	2662.893	180	2662.893	255	2662.893	330	2662.893	
35	2662.893	110	2662.893	185	2662.893	260	2662.893	335	2662.893	
40	2662.893	115	2662.893	190	2662.893	265	2662.893	340	2662.893	
45	2662.893	120	2662.893	195	2662.893	270	2662.893	345	2662.893	
50	2662.893	125	2662.893	200	2662.893	275	2662.893	350	2662.893	
55	2662.893	130	2662.893	205	2662.893	280	2662.893	355	2662.893	
60	2662.893	135	2662.893	210	2662.893	285	2662.893			
65	2662.893	140	2662.893	215	2662.893	290	2662.893			
70	2662.893	145	2662.893	220	2662.893	295	2662.893			

0.0 ohm K	: 0.000	1.0 ohm K	: 0.000
RMSS	: 0.000	RMSt	: 0.000
RSS	: 0.000		

Contour type : Ground Wave
 Signal strength : 0.100 mV/m
 Area covered : 0.000 sq. km
 Population covered: 0 persons

Azimuth	Field	Contour	Distance
Degrees	mV/m @ 1 km	mV/m	km
0	2662.89	0.100	240.19
5	2662.89	0.100	243.13
10	2662.89	0.100	240.82
15	2662.89	0.100	240.55
20	2662.89	0.100	241.23
25	2662.89	0.100	235.42
30	2662.89	0.100	236.32
35	2662.89	0.100	245.75
40	2662.89	0.100	247.74
45	2662.89	0.100	234.65
50	2662.89	0.100	225.92
55	2662.89	0.100	224.62
60	2662.89	0.100	221.14
65	2662.89	0.100	215.40
70	2662.89	0.100	202.11
75	2662.89	0.100	199.64
80	2662.89	0.100	199.59
85	2662.89	0.100	199.55
90	2662.89	0.100	199.53
95	2662.89	0.100	199.54
100	2662.89	0.100	199.39
105	2662.89	0.100	199.47
110	2662.89	0.100	199.58
115	2662.89	0.100	199.69
120	2662.89	0.100	200.00
125	2662.89	0.100	200.17
130	2662.89	0.100	200.39
135	2662.89	0.100	200.61
140	2662.89	0.100	201.34
145	2662.89	0.100	202.14
150	2662.89	0.100	202.57
155	2662.89	0.100	204.04
160	2662.89	0.100	204.75
165	2662.89	0.100	205.42
170	2662.89	0.100	206.35
175	2662.89	0.100	206.66
180	2662.89	0.100	207.06
185	2662.89	0.100	206.82
190	2662.89	0.100	206.82
195	2662.89	0.100	206.67
200	2662.89	0.100	206.85
205	2662.89	0.100	207.11
210	2662.89	0.100	207.07
215	2662.89	0.100	207.99
220	2662.89	0.100	208.90
225	2662.89	0.100	209.80
230	2662.89	0.100	212.46
235	2662.89	0.100	212.85
240	2662.89	0.100	228.76
245	2662.89	0.100	247.65

WHAM CLASS A PROTECTED DAYTIME SERVICE CONTOUR
(Cont.)

<u>Azimuth</u>	<u>Field</u>	<u>Contour</u>	<u>Dist. (km)</u>
250	2662.89	0.100	256.45
255	2662.89	0.100	260.16
260	2662.89	0.100	257.84
265	2662.89	0.100	250.70
270	2662.89	0.100	249.25
275	2662.89	0.100	248.06
280	2662.89	0.100	255.95
285	2662.89	0.100	251.90
290	2662.89	0.100	251.62
295	2662.89	0.100	252.98
300	2662.89	0.100	257.09
305	2662.89	0.100	257.36
310	2662.89	0.100	252.79
315	2662.89	0.100	248.10
320	2662.89	0.100	247.98
325	2662.89	0.100	247.44
330	2662.89	0.100	246.84
335	2662.89	0.100	245.41
340	2662.89	0.100	240.26
345	2662.89	0.100	234.53
350	2662.89	0.100	233.49
355	2662.89	0.100	236.99

□

Note: All contour distances based on FCC Figure M-3 soil conductivities.