

ENGINEERING REPORT
ELECTROMAGNETIC FIELD STRENGTH SURVEY
AT THE SOUTH TOWER OF THE
WORLD TRADE CENTER

TV & FM STATIONS OPERATING AT THE WORLD TRADE CENTER

- | | |
|--|--|
| 1. WCBS-TV, New York, New York
Ch. 2, 21.4 kW (Max-BT), 482 m | 9. WNJU(TV), Linden, New Jersey
Ch. 47, 4570 kW (Max-DA, BT), 460 m |
| 2. WNBC(TV), New York, New York
Ch. 4, 17.4 kW, 515 m | 10. W60AI ¹ , New York, New York
Ch. 60, 45.5 kW (Max-DA), 436 m |
| 3. WNYW(TV), New York, New York
Ch. 5, 17.4 kW, 515 m | 11. WKCR-FM, New York, New York
Ch. 210B1, 0.63 kW (H&V), 433 m |
| 4. WABC-TV, New York, New York
Ch. 7, 64.6 kW (Max-BT), 491 m | 12. WPAT-FM, Paterson, New Jersey
Ch. 226B, 5.4 kW (H&V), 433 m |
| 5. WWOR-TV, Secaucus, New Jersey
Ch. 9, 61.7 kW (Max-BT), 500 m | 13. WNYC-FM, New York, New York
Ch. 230B, 5.4 kW (H&V), 432 m |
| 6. WPIX(TV), New York, New York
Ch. 11, 58.9 kW (Max-BT), 506 m | 14. WKTU(FM), Lake Success, New York
Ch. 278B, 5.4 kW (H&V), 432 m |
| 7. WNET(TV), Newark, New Jersey
Ch. 13, 60.3 kW (Max-BT), 500 m | |
| 8. WPXX-TV, New York, New York
Ch. 31, 2820 kW (Max-DA, BT), 475 m
Appl.: BPCT-961205KF
Ch. 31, 5000 kW (Max-DA, BT), 475 m | |

¹ The W60AI antenna is located on the south tower of the World Trade Center (WTC2).

Figure 2

ENGINEERING REPORT
ELECTROMAGNETIC FIELD STRENGTH SURVEY
AT THE SOUTH TOWER OF THE
WORLD TRADE CENTER

Percent Occupational/Controlled Exposure Measured, 12/17-18/98 ¹									
Operating Mode	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Point 7	Point 8	Point 2A
All Stations in Normal Mode	6.28	6.03	6.41	0.91	2.80	3.05	8.10	6.20	--
WNBC (CH 4) and WNYW (CH 5) on Auxiliary Antennas	8.10	7.52	7.30	2.29	4.74	3.86	9.21	14.65	--
WABC-TV (CH 7) on Auxiliary Antenna	13.35	11.38	11.58	2.04	5.63	8.75	8.05	12.95	22.37
WWOR-TV (CH 9) and WNET (CH 13) on Auxiliary Antennas	10.81	13.48	13.08	1.46	5.04	5.10	7.91	8.85	22.60
WPIX on Auxiliary Antenna	9.67	12.45	12.62	1.72	5.08	5.16	6.64	9.94	16.70
Calculated Percent General Population/Uncollected Exposure ²									
Operating Mode	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Point 7	Point 8	Point 2A
All Stations in Normal Mode	31.40	30.15	32.05	4.55	14.00	15.25	40.50	31.00	--
WNBC (CH 4) and WNYW (CH 5) on Auxiliary Antennas	40.50	37.60	36.50	11.45	23.70	19.30	46.05	73.25	--
WABC-TV (CH 7) on Auxiliary Antenna	66.75	56.90	57.90	10.20	28.15	43.75	40.25	64.75	111.85
WWOR-TV (CH 9) and WNET (CH 13) on Auxiliary Antennas	54.05	67.40	65.40	7.30	25.15	25.50	39.55	44.25	113.00
WPIX on Auxiliary Antenna	48.35	62.25	63.10	8.60	25.40	25.80	33.20	49.70	83.50

¹ See Figure 5 for identification of measurement locations.

² Calculated from measured occupational/controlled exposure data.

ENGINEERING REPORT ELECTROMAGNETIC FIELD STRENGTH SURVEY AT THE SOUTH TOWER OF THE WORLD TRADE CENTER

COMPARISON OF MEASURED AND CALCULATED EXPOSURE DATA

Measurement Point 1

Operating Mode	Measured Data				Calculated Data				Equivalent		
	FCC MPE for GP/UC Exposure (mW/cm ²)	Measured Electric Field Strength (V/m ²)	Plane Wave Power Density (mW/cm ²)	Percent FCC MPE for GP/UC Exposure	Slant Distance to Target (feet)	Depression Angle to Target (deg.)	Horizontal Plane Relative Field Factor	Vertical Plane Relative Field Factor	Total ERP Toward Target (kW)	Plane Wave Power Density (mW/cm ²)	Percent FCC MPE for GP/UC Exposure
All Stations Off the Air	0.20	117.80	0.0312	15.60	--	--	--	--	--	--	--
WCBS-TV on Main Ant	0.20	77.75	0.0206	10.30	363.1	32.8	0.920	0.160	0.464	0.0007	0.35
WNBC on Main Ant	0.20	108.30	0.0287	14.35	443.7	48.0	0.920	0.360	1.804	0.0016	0.80
WNYC on Aux Ant	0.20	106.00	0.0281	14.05	305.2	15.4	0.920	0.730	7.848	0.0152	7.60
WNYW on Main Ant	0.20	80.11	0.0212	10.60	443.7	48.0	0.900	0.450	2.854	0.0026	1.30
WNYW on Aux Ant	0.20	113.10	0.0300	15.00	303.4	14.3	0.660	0.630	3.669	0.0070	3.50
WABC-TV on Main Ant	0.20	98.96	0.0262	13.10	387.6	40.0	1.000*	0.500*	16.150	0.0193	9.65
WABC-TV on Aux Ant	0.20	240.30	0.0637	31.85	295.1	7.2	0.600	0.900	22.793	0.0471	23.55
WWOR-TV on Main Ant	0.20	84.82	0.0225	11.25	405.2	42.8	1.000*	0.500*	15.425	0.0169	8.45
WWOR-TV on Aux Ant	0.20	120.10	0.0319	15.95	291.5	1.2	0.580	1.000	16.114	0.0341	17.05
WPIX on Main Ant	0.20	110.70	0.0294	14.70	424.4	45.6	0.740	0.200*	1.351	0.0013	0.65
WPIX on Aux Ant	0.20	221.40	0.0587	29.35	293.5	5.1	0.540	1.000	17.175	0.0359	17.95
WNET on Main Ant	0.20	186.10	0.0494	24.70	405.2	42.8	1.000*	0.500*	15.075	0.0165	8.25
WNET on Aux Ant	0.20	160.20	0.0425	21.25	292.7	3.9	0.500	1.000	11.975	0.0251	12.55
WPXN-TV on Main Ant	0.38	122.50	0.0325	8.55	356.5	33.7	0.900	0.150*	51.395	0.0727	19.13
WNYJ on Main Ant	0.45	146.00	0.0387	8.60	328.8	25.8	1.000*	0.150*	102.825	0.1711	38.02
WGOB on Main Ant	0.50	89.53	0.0237	4.74	--	--	--	--	--	--	--
WTC FMCs on Master Ant	0.20	219.10	0.0581	29.05	294.0	5.9	0.700	1.000*	19.727	0.0821	41.05

* Calculation of ERP based on manufacturer's horizontal and vertical plane pattern data unless otherwise noted.

* Assumed value

Measurement Point 1A

Operating Mode	Measured Data				Calculated Data				Equivalent	
	FCC MPE for GPUIC Exposure (mW/cm ²)	Measured Electric Field Strength (V/m)	Equivalent Plane Wave Power Density (mW/cm ²)	Percent FCC MPE for GPUIC Exposure	Slant Distance to Target (feet)	Horizontal Plane Relative Field Factor	Vertical Plane Relative Field Factor	Total ERP Toward Target ¹ (kW)	Equivalent Plane Wave Power Density (mW/cm ²)	Percent FCC MPE for GPUIC Exposure
All Stations Off-the-Air	0.20	110.70	0.0294	14.70	..	..	..	..	..	..
WCBS-TV on Main Ant	0.20	75.40	0.0200	10.00	361.3	0.920	0.100	0.181	0.0002	0.10
WNBC on Main Ant	0.20	115.40	0.0306	15.30	452.7	0.900	0.350	1.727	0.0015	0.75
WNBC on Aux. Ant	0.20	113.10	0.0300	15.00	318.1	0.990	0.750	9.593	0.0170	8.50
WNYW on Main Ant	0.20	84.82	0.0225	11.25	452.7	0.880	0.450	2.729	0.0024	1.20
WNYW on Aux. Ant	0.20	96.60	0.0256	12.80	316.4	0.740	0.720	4.939	0.0089	4.45
WABC-TV on Main Ant	0.20	108.30	0.0287	14.35	397.8	1.000*	0.500*	16.150	0.0184	9.20
WABC-TV on Aux. Ant	0.20	230.30	0.0612	30.60	308.4	0.700	0.990	31.024	0.0587	29.35
WWOR-TV on Main Ant	0.20	70.68	0.0187	9.35	415.0	1.000*	0.500*	15.425	0.0161	8.05
WWOR-TV on Aux. Ant	0.20	195.50	0.0519	25.95	305.0	0.680	1.000	20.865	0.0403	20.15
WPIX on Main Ant	0.20	95.60	0.0256	12.80	433.8	0.740	0.200*	1.351	0.0013	0.65
WPIX on Aux. Ant	0.20	296.80	0.0787	39.35	306.8	0.620	1.000	22.641	0.0432	21.60
WNET on Main Ant	0.20	183.70	0.0487	24.35	415.0	1.000*	0.500*	15.075	0.0157	7.85
WNET on Aux. Ant	0.20	190.80	0.0506	25.30	306.1	0.600	1.000	17.244	0.0331	16.55
WPXN-TV on Main Ant	0.38	110.70	0.0294	7.74	367.6	0.900	0.150*	51.395	0.0684	18.00
WNLJ on Main Ant	0.45	139.00	0.0369	8.20	340.8	1.000*	0.150*	102.825	0.1592	35.38
WGOB on Main Ant	0.50	91.80	0.0214	4.88	..	..	..	..	..	..
WTC FM's on Master Ant	0.20	256.80	0.0681	34.05	307.4	0.750	1.000*	22.646	0.0862	43.10

¹ Calculation of ERP based on manufacturer's horizontal and vertical plane pattern data unless otherwise noted.
* Assumed value.

Calculated Data

Calculation of ERP based on manufacturer's horizontal and vertical plane pattern data unless otherwise noted.
Assumed value.

Measurement Point #

Operating Mode	Measured Data				Calculated Data				Equivalent Plane Wave Density (mW/cm ²)	Percent FCC MPE for GP/UC Exposure
	FCC MPE for GP/UC Exposure (mW/cm ²)	Measured Electric Field Strength (V/m ²)	Equivalent Plane Wave Power Density (mW/cm ²)	Percent FCC MPE for GP/UC Exposure	Slant Distance to Target (feet)	Depression Angle to Target (deg.)	Horizontal Plane Relative Field Factor	Vertical Plane Relative Field Factor	Total ERP Toward Target ¹ (kW)	
All Stations Off-the-Air	0.20	161.90	0.0137	21.85	--	--	--	--	--	--
WCBS-TV on Main Ant	0.20	143.70	0.0381	19.05	391.1	29.2	0.920	0.110	0.219	0.0063
WNBC on Main Ant	0.20	172.00	0.0456	22.80	474.6	43.8	0.880	0.350	1.651	0.0013
WNBC on Aux. Ant	0.20	146.00	0.0387	19.35	348.5	13.4	1.000	0.790	10.859	0.0161
WNYW on Main Ant	0.20	148.40	0.0391	19.70	474.6	43.8	0.850	0.450	2.546	0.0020
WNYW on Aux. Ant	0.20	157.80	0.0419	20.95	347.0	12.4	0.880	0.760	7.783	0.0116
WABC-TV on Main Ant	0.20	174.00	0.0475	23.75	422.5	36.0	1.000*	0.500*	16.150	0.0163
WABC-TV on Aux. Ant	0.20	230.90	0.0612	30.60	339.7	6.3	0.960	0.990	58.351	0.0909
WWOR-TV on Main Ant	0.20	186.10	0.0494	24.70	438.8	38.8	1.000*	0.500*	15.425	0.0144
WWOR-TV on Aux. Ant	0.20	226.20	0.0600	30.00	336.6	1.0	0.940	1.000	42.324	0.0672
WPIX on Main Ant	0.20	73.04	0.0194	9.70	456.6	41.4	0.750	0.200*	1.388	0.0012
WPIX on Aux. Ant	0.20	161.90	0.0437	21.85	338.3	4.4	0.940	1.000	52.044	0.0818
WNET on Main Ant	0.20	143.70	0.0381	19.05	438.8	38.8	1.000*	0.500*	15.075	0.0141
WNET on Aux. Ant	0.20	246.70	0.0575	28.75	337.7	3.4	0.920	1.000	40.543	0.0639
WFXN-TV on Main Ant	0.38	169.60	0.0450	11.84	394.2	30.0	0.840	0.150*	44.770	0.0518
WJHI on Main Ant	0.45	230.90	0.0612	13.60	309.3	22.7	1.000*	0.150*	102.825	0.1355
WGOAL on Main Ant	0.50	129.50	0.0314	6.88	--	--	--	--	--	--
WTC FM's on Master Ant	0.20	237.90	0.0631	31.55	338.8	5.1	0.830	1.000*	27.735	0.0869
										43.45

¹ Calculation of ERP based on manufacturer's horizontal and vertical plane pattern data unless otherwise noted.
* Assumed value

MARCH 1999

Notes: 1. Measurement locations are indicated by circled numbers and letters. e.g. (1A)

2. Observation deck walkway is approximately 9 feet above building roof level.

Walkway Rail Stanchions

Structure Perimeter

North

32' - 6"

4' - 6"

169' - 2"

207' - 2"

1

1A

1B

2

2A

2B

3

4

5

6

7

8

Walkway

W60A1

Escalator

Walkway

59' - 2"

207' - 2"

South

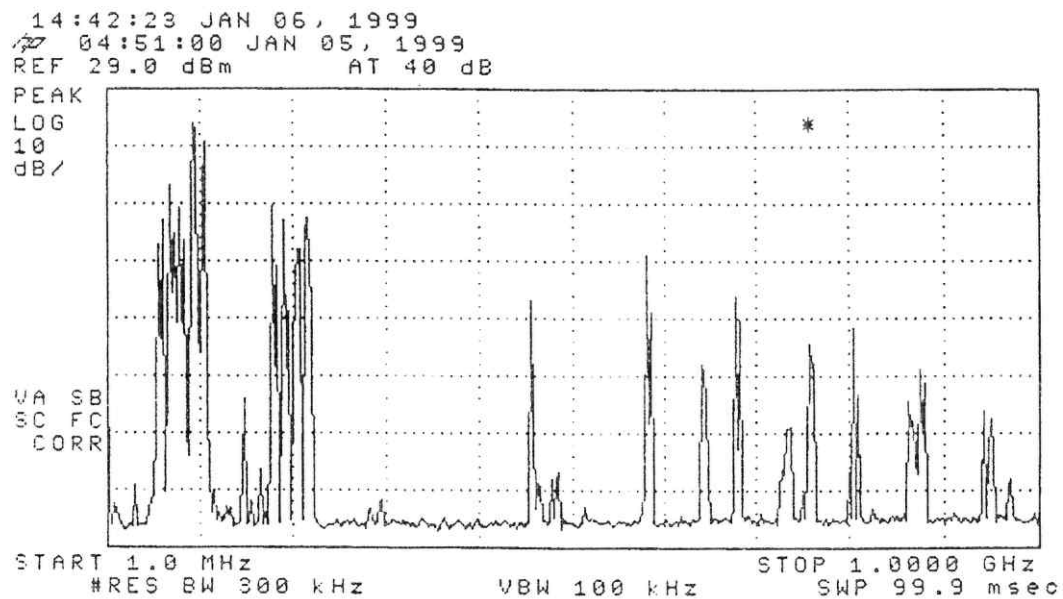
Not to scale

MEASUREMENT LOCATIONS
WORLD TRADE CENTER
SOUTH TOWER ROOFTOP OBSERVATION DECK WALKWAY

Denny & Associates, P.C. Consulting Engineers

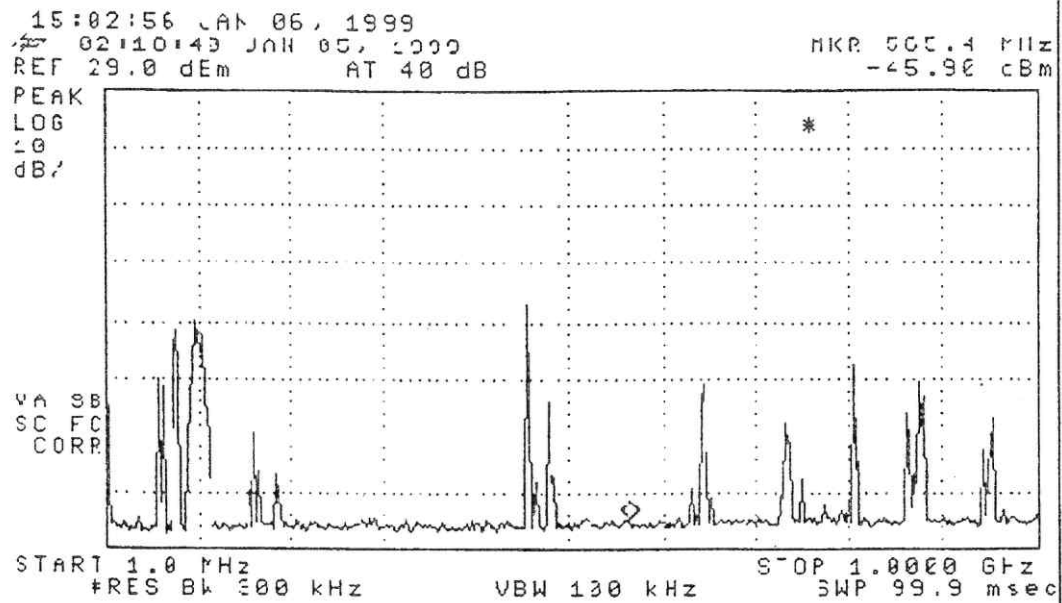
ENGINEERING REPORT
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AT THE SOUTH TOWER OF THE
WORLD TRADE CENTER

SPECTRUM ANALYZER PLOTS FOR
SINGLE-STATION MEASUREMENT PERIODS

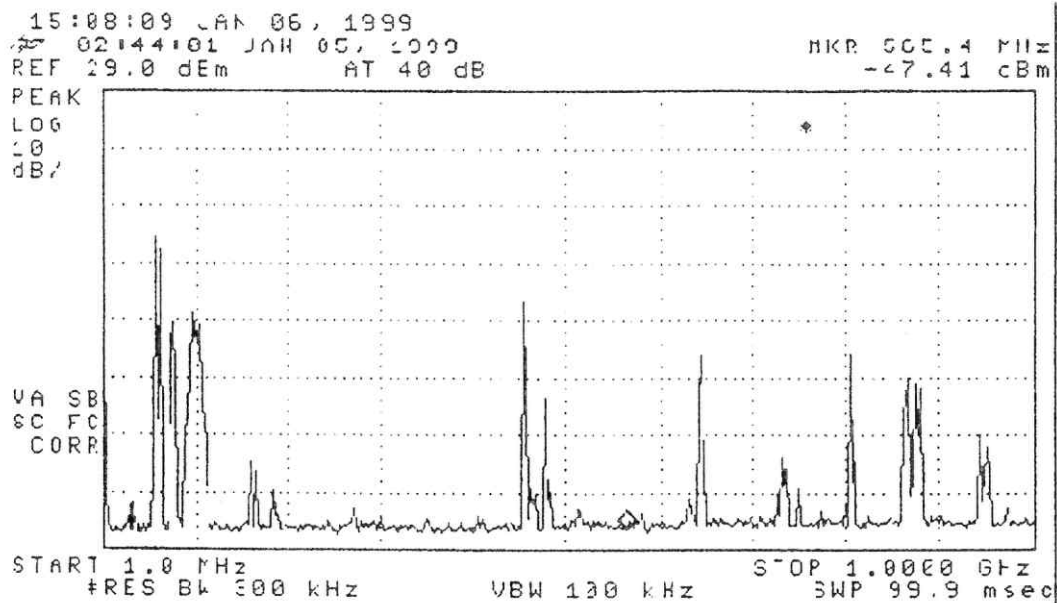


All WTC Stations in Normal Operating Mode

Figure 6
Sheet 2 of 10

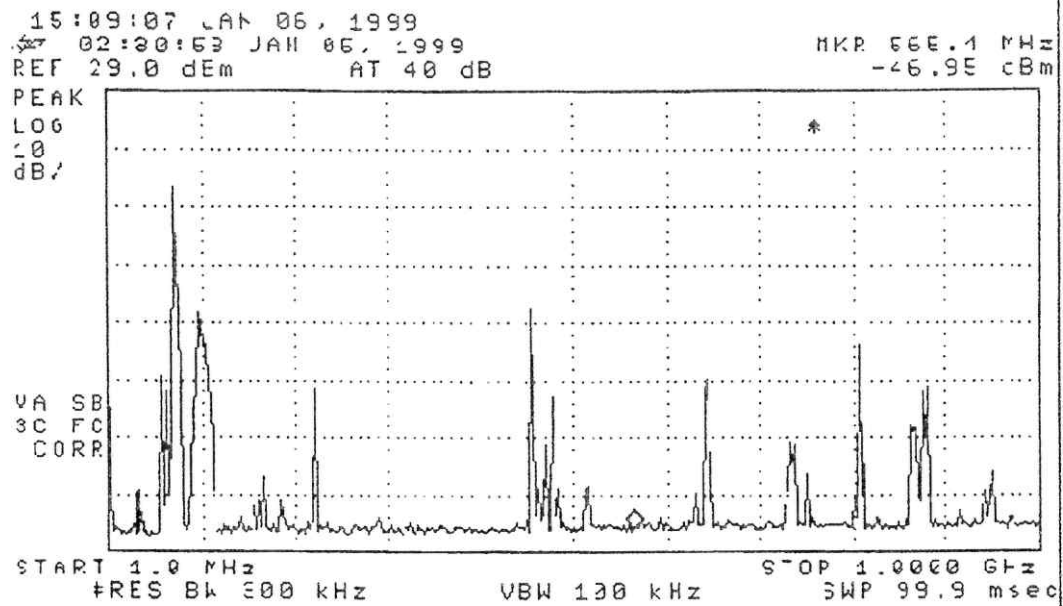


All WTC Stations Off-the-Air

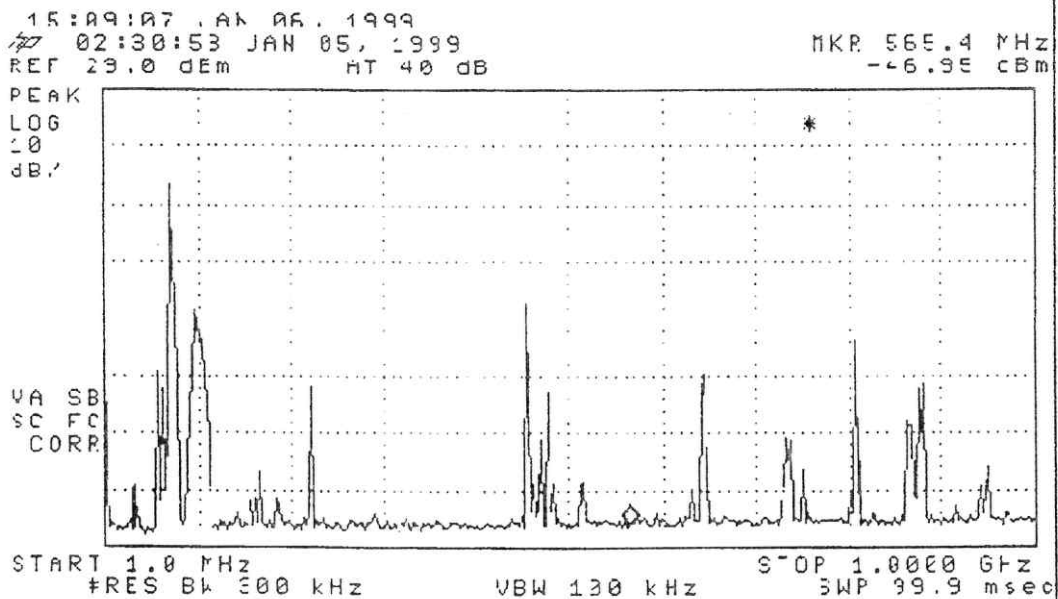


WCBS-TV (54-60 MHz) Operating with Main Antenna

Figure 6
Sheet 3 of 10

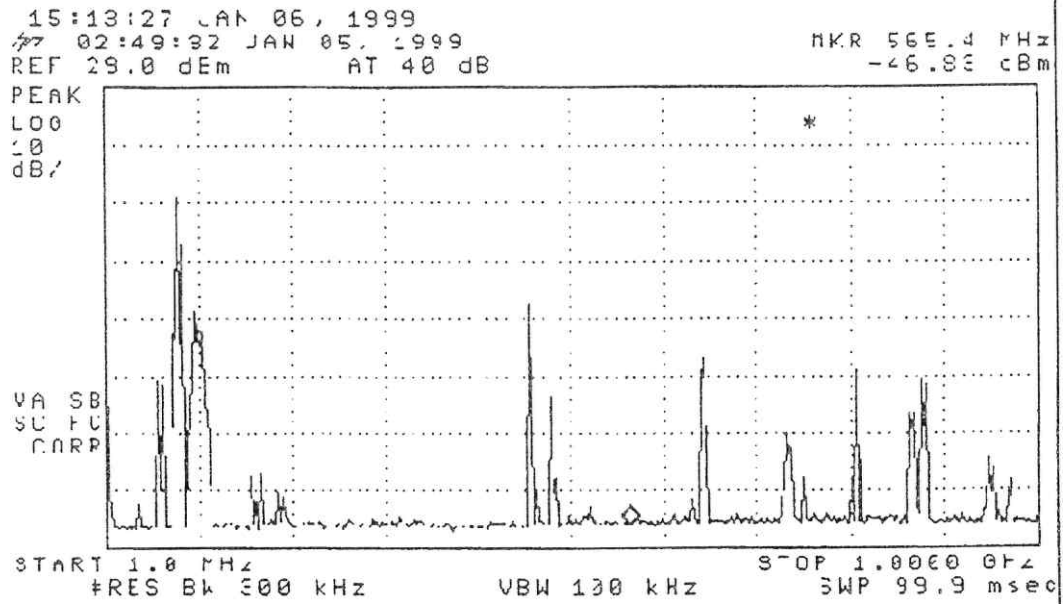


WNBC (66-72 MHz) Operating with Main Antenna

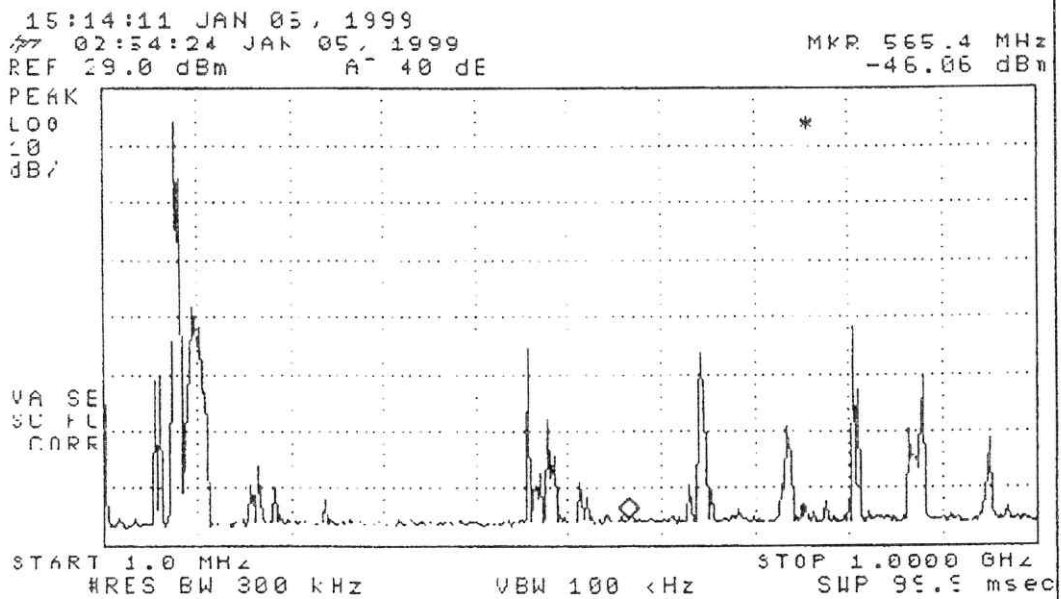


WNBC (66-72 MHz) Operating with Auxiliary Antenna

Figure 6
Sheet 4 of 10

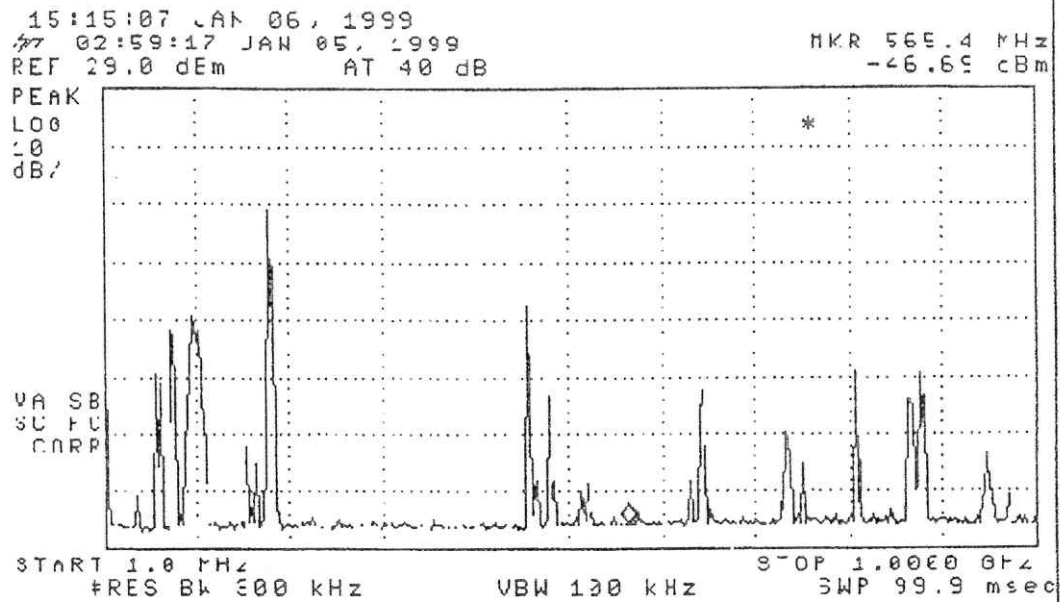


WNYW (76-82 MHz) Operating with Main Antenna

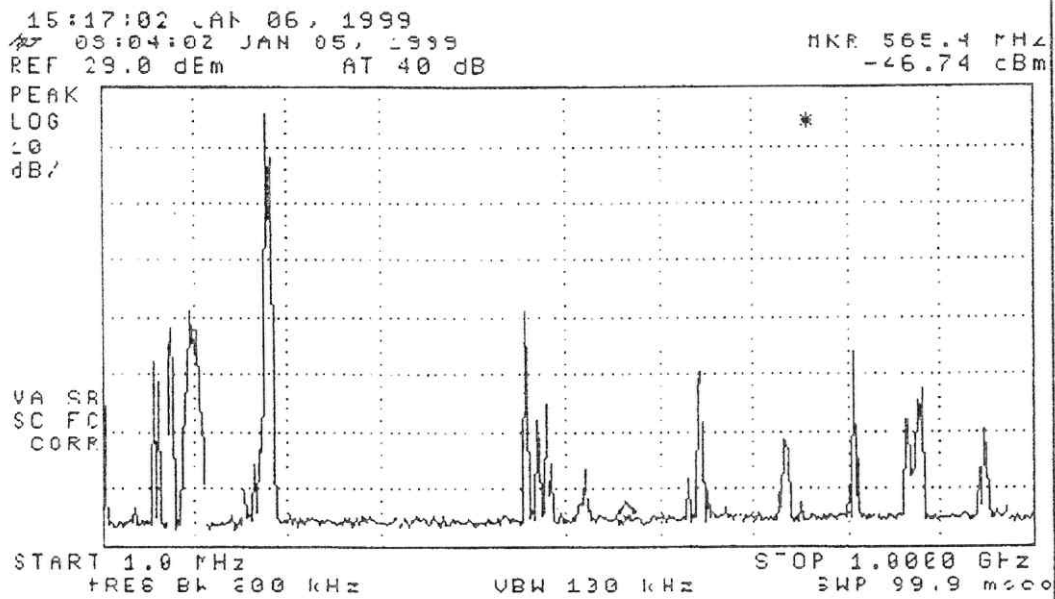


WNYW (76-82 MHz) Operating with Auxiliary Antenna

Figure 6
Sheet 5 of 10

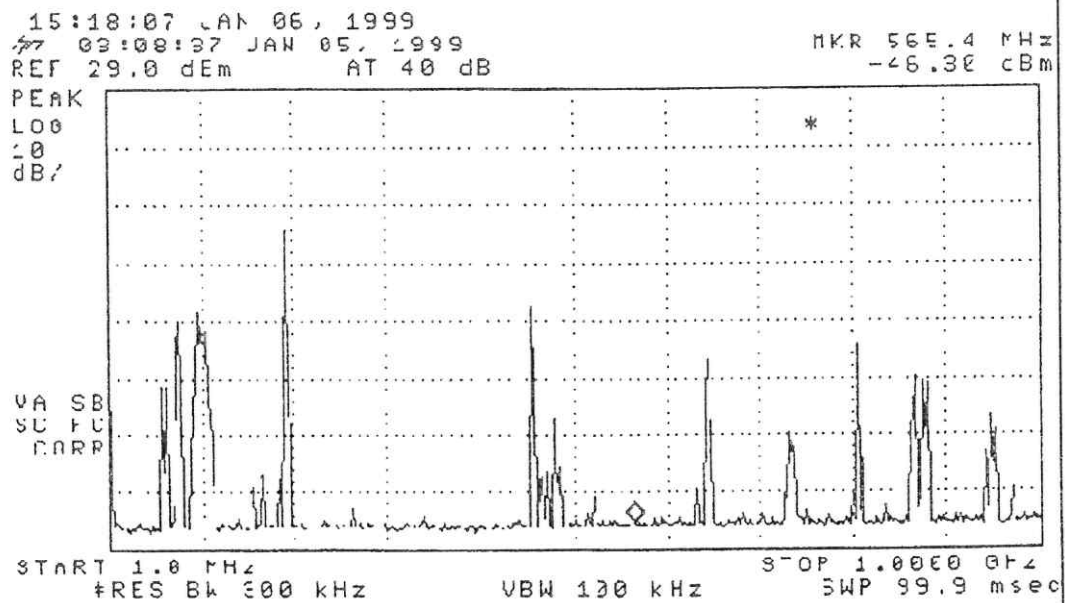


WABC-TV (174-180 MHz) Operating with Main Antenna

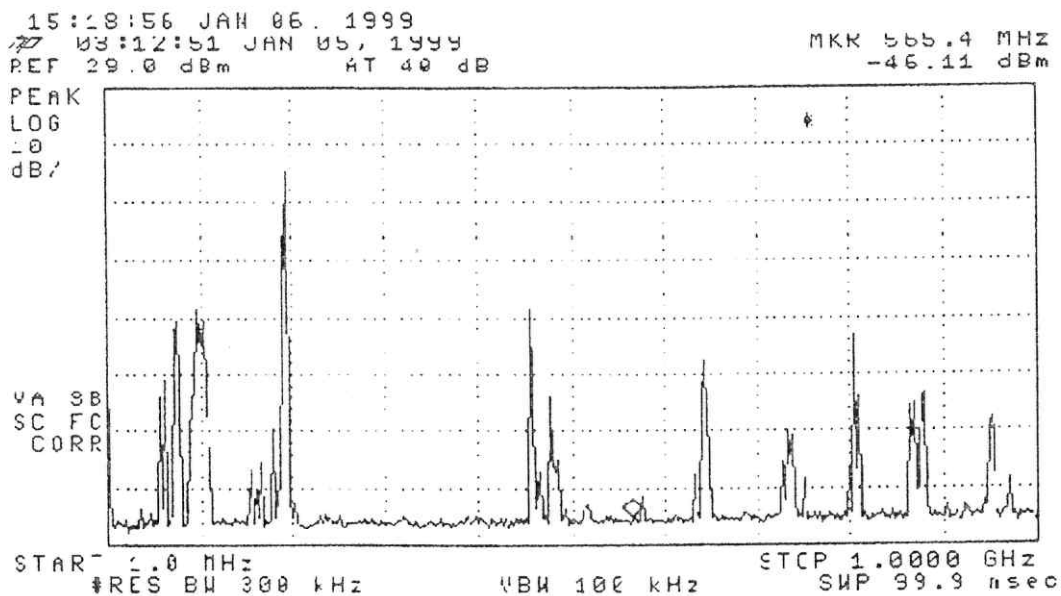


WABC-TV (174-180 MHz) Operating with Auxiliary Antenna

Figure 6
Sheet 6 of 10

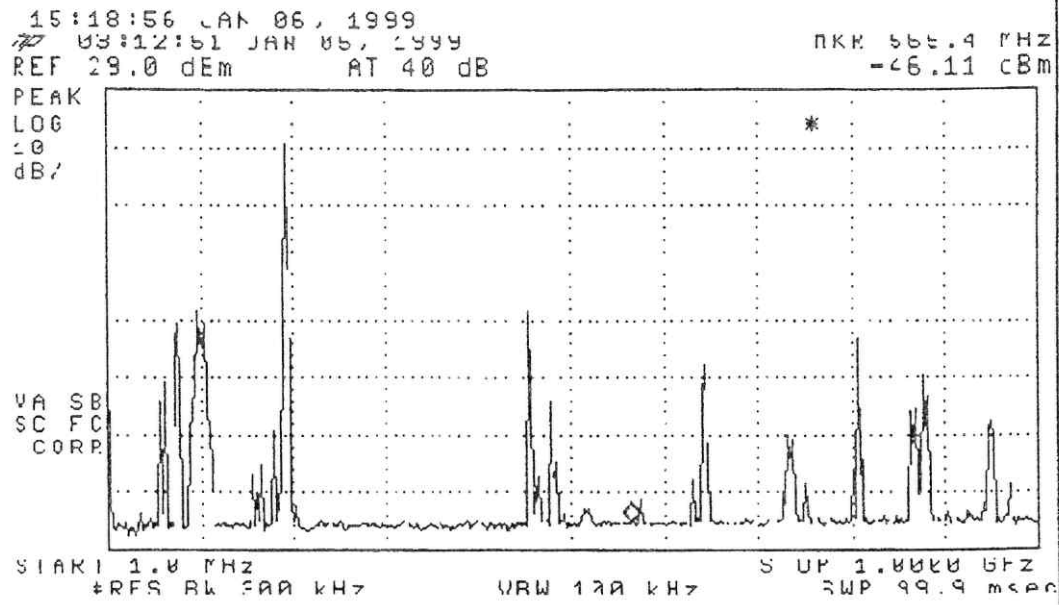


WWOR-TV (186-192 MHz) Operating with Main Antenna

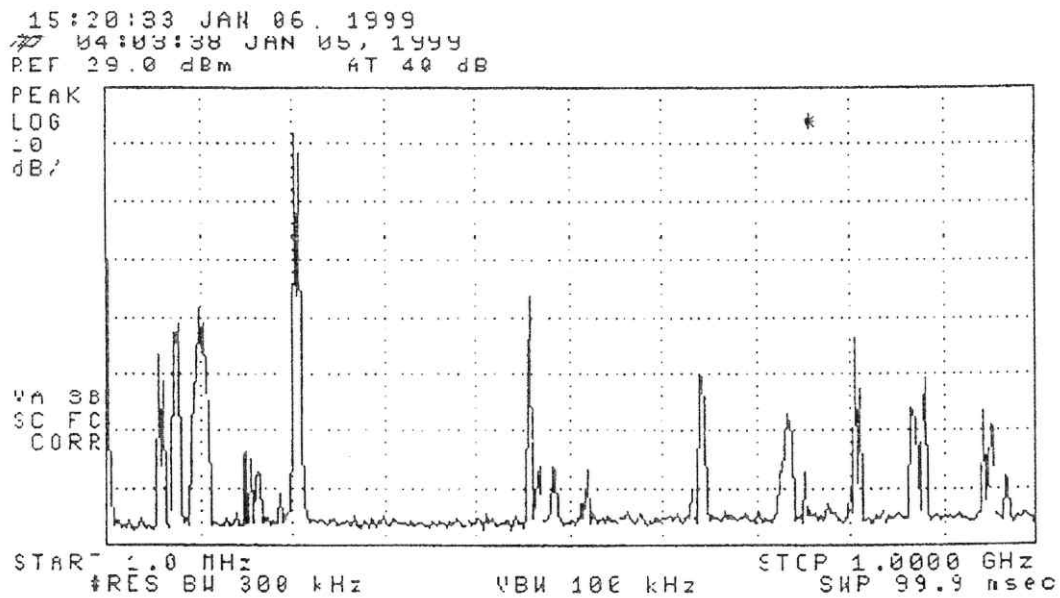


WWOR-TV (186-192 MHz) Operating with Auxiliary Antenna

Figure 6
Sheet 7 of 10

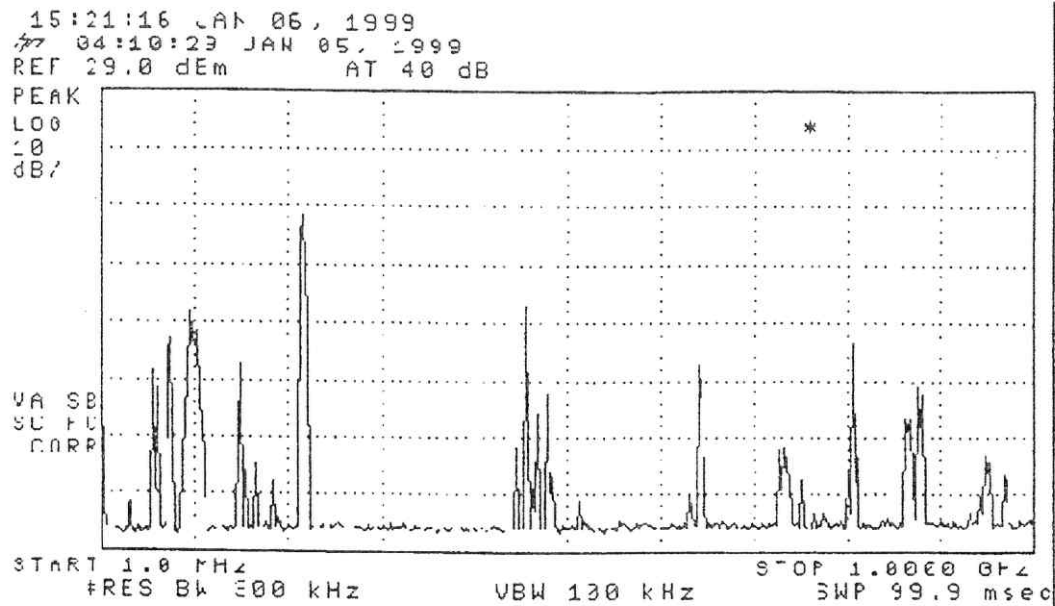


WPIX (198-204 MHz) Operating with Main Antenna

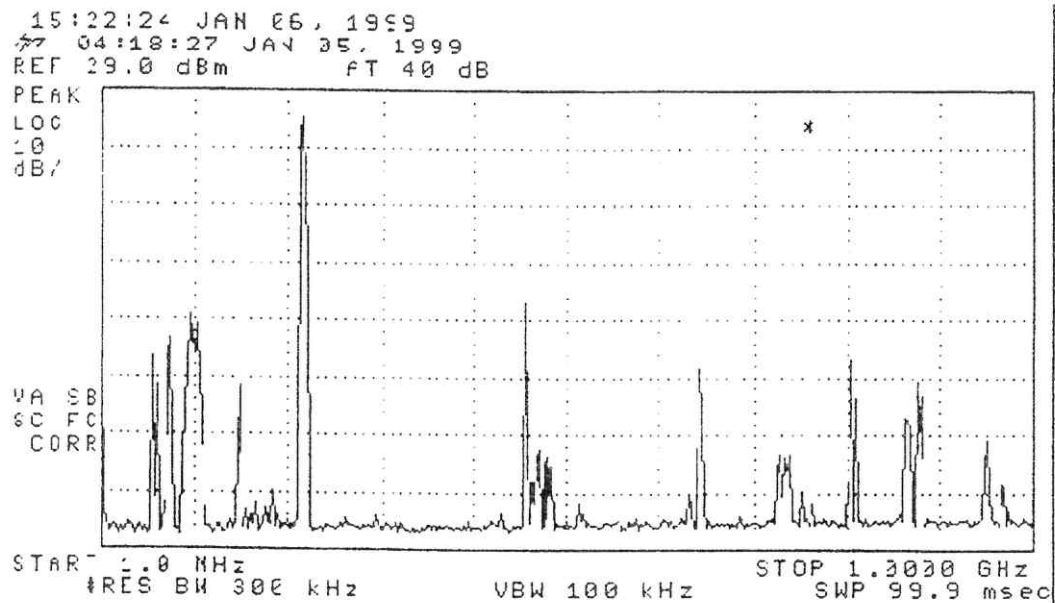


WPIX (198-204 MHz) Operating with Auxiliary Antenna

Figure 6
Sheet 8 of 10

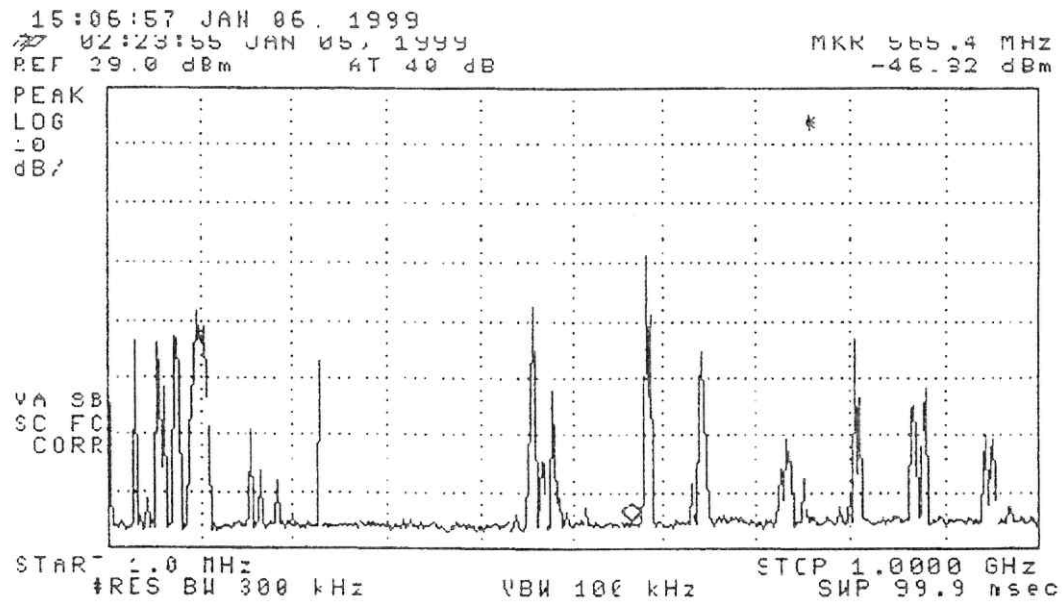


WNET (210-216 MHz) Operating with Main Antenna

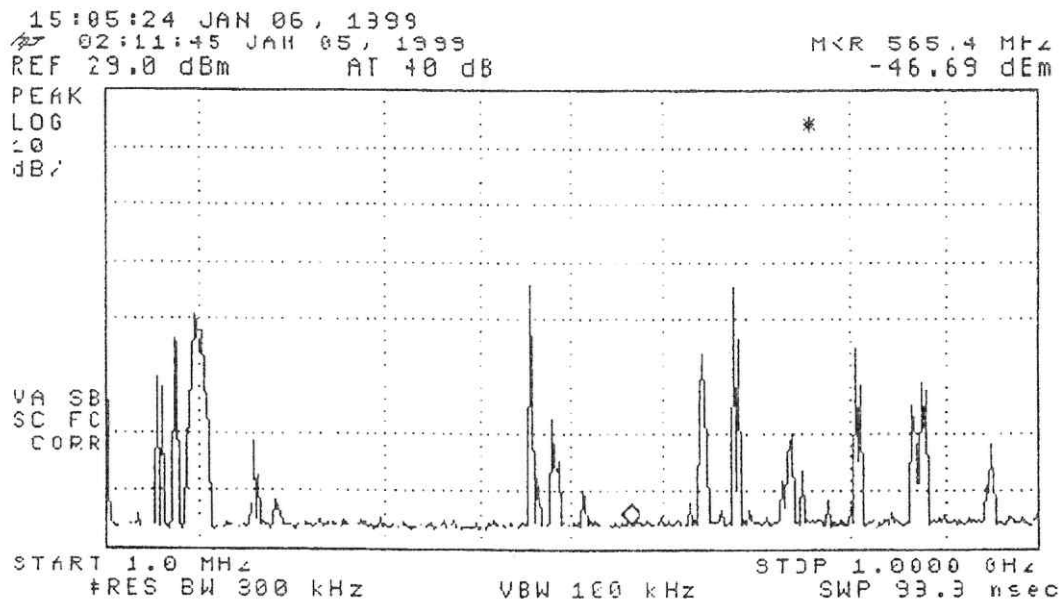


WNET (210-216 MHz) Operating with Auxiliary Antenna

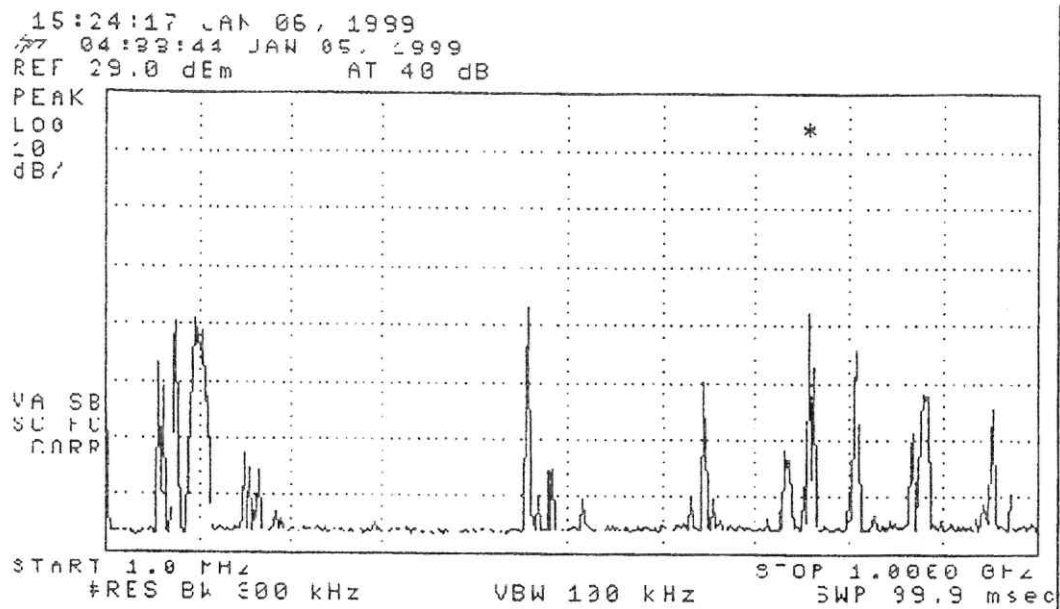
Figure 6
Sheet 9 of 10



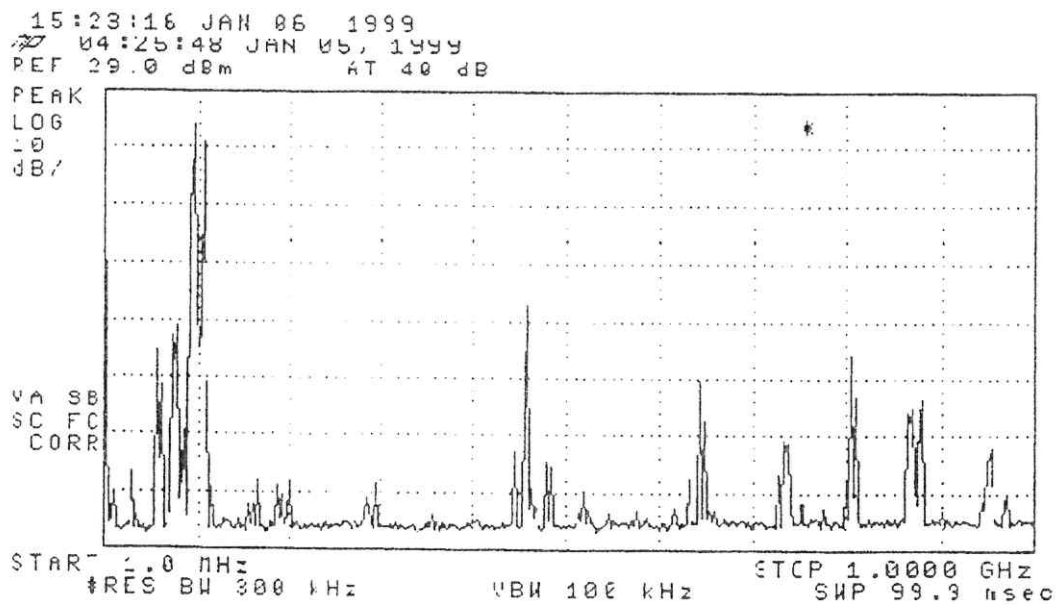
WPXN-TV (572-578 MHz) Operating with Main Antenna



WNJU (668-674 MHz) Operating with Main Antenna



W60AI (746-752 MHz) Operating with Main Antenna



WTC FM Stations Operating into Master Antenna

Measurement Point 2A

Operating Mode	Measured Data				Calculated Data				Equivalent		
	FCC MPE for GPT/C Exposure	Plane Wave Electric Field Strength	Plane Power Density	Percent MPE for GPT/C Exposure	Slant Distance to Target	Depression Angle Targeted	Horizontal Plane Relative Field Factor	Vertical Plane Relative Field Factor	Total ERP Toward Target!	Plane Wave Power Density	Percent FCC MPE for GPT/C Exposure
	(mW/cm²)	(V/m²)	(mW/cm²)		(feet)	(deg.)			(kW)	(mW/cm²)	
All Stations Off-the-Air	0.20	228.5	0.0406	30.30	--	--	0.920	0.150	0.408	0.0004	0.20
WBBS-TV on Main Ant	0.20	169.6	0.0450	22.50	406.6	28.0	0.880	0.350	1.651	0.0012	0.60
WNBC on Main Ant	0.20	188.5	0.0560	25.00	487.4	42.4	0.960	0.800	10.263	0.0138	6.90
WNBC on Aux. Ant	0.20	179	0.0475	23.75	365.7	12.7	0.960	0.450	2.486	0.0019	0.95
WNYW on Main Ant	0.20	174.3	0.0462	23.10	487.4	42.4	0.840	0.780	9.554	0.0129	6.45
WNYW on Aux. Ant	0.20	214.4	0.0569	28.45	364.3	11.8	0.950	0.500*	16.150	0.0152	7.60
WBAC-TV on Main Ant	0.20	186.1	0.0494	24.70	436.8	31.6	1.000*	0.990	63.314	0.0892	44.60
WBAC-TV on Aux. Ant	0.20	306.3	0.0812	40.60	357.3	6.0	1.000	0.500*	15.425	0.0135	6.75
WWOR-TV on Main Ant	0.20	179	0.0475	23.75	452.6	37.3	1.000	1.000	47.900	0.0686	34.30
WWOR-TV on Aux. Ant.	0.20	381.7	0.1012	50.60	354.4	1.0	1.000	0.200*	1.502	0.0012	0.60
WPXI on Main Ant	0.20	113.1	0.0300	15.00	469.9	40.0	0.780	1.000	58.900	0.0836	41.80
WPXI on Aux. Ant.	0.20	263.9	0.0700	35.00	356.0	4.2	1.000	0.500*	15.075	0.0132	6.60
WNET on Main Ant	0.20	155.5	0.0412	20.60	452.6	37.3	1.000*	1.000*	47.900	0.0682	34.10
WNET on Aux. Ant	0.20	245	0.0650	32.50	355.4	3.2	1.000	1.000	40.608	0.0435	11.45
WTPN TV on Main Ant	0.38	214.4	0.0569	14.97	409.5	28.7	0.800	0.150	102.825	0.1243	27.62
WJVI-TV on Main Ant	0.45	226.2	0.0600	13.33	385.6	21.7	1.000*	0.150*	27.735	0.0785	39.25
WGAI on Main Ant	0.50	167.2	0.0444	8.88	--	--	0.830	1.000*	--	--	--
TTC FM's on Master Ant.	0.20	339.3	0.0900	45.00	356.5	4.8					

Calculation of ERP based on manufacturer's horizontal and vertical plane pattern data unless otherwise noted. Assumed value.

Measurement Point 2B

Operating Mode	Measured Data				Calculated Data			
	FCC MPE for C/PU/C Exposure (mW/cm ²)	Measured Electric Field Strength (V/m)	Equivalent Plane Wave Power Density (mW/cm ²)		Slant Distance to Target (feet)	Depression Angle to Target (deg.)	Horizontal Plane Relative Field Factor	
			Plane Wave Power Density (mW/cm ²)	Percent FCC MPE for GPU/C Exposure			Vertical Plane Relative Field Factor	Total ERP Toward Target ¹ (kW)
All Stations Off the Air	0.20	197.9	0.0325	26.25	--	--	--	--
WCBS-TV on Main Ant	0.20	155.5	0.0412	20.60	423.0	26.8	0.170	0.523
WNBC on Main Ant	0.20	186.1	0.0494	24.70	501.2	40.9	0.350	1.651
WNBC on Aux Ant	0.20	160.2	0.0425	21.25	384.0	12.1	0.820	9.903
WNYW on Main Ant	0.20	160.2	0.0425	21.25	501.2	40.9	0.450	2.486
WNYW on Aux Ant	0.20	197.9	0.0525	26.25	382.6	11.2	0.800	10.695
WABC-TV on Main Ant	0.20	188.5	0.0500	25.00	452.2	33.2	1.000*	16.150
WABC-TV on Aux Ant	0.20	388.7	0.1031	51.55	376.0	5.7	1.000	64.600
WWOR-TV on Main Ant	0.20	174.3	0.0462	23.10	467.4	35.9	0.500*	15.425
WWOR-TV on Aux Ant	0.20	393.4	0.1044	52.20	373.2	0.9	1.000	47.900
WPXI on Main Ant	0.20	131.9	0.0350	17.50	484.2	38.5	0.200*	1.502
WPXI on Aux Ant	0.20	290.3	0.0744	37.20	374.7	4.0	1.000	58.900
WNET on Main Ant	0.20	195.5	0.0519	25.95	467.4	35.9	0.500*	15.075
WNET on Aux Ant	0.20	278	0.0737	36.85	374.2	3.1	1.000	47.900
WPXN-TV on Main Ant	0.38	193.2	0.0512	13.47	425.9	27.5	0.900	51.395
WISN on Main Ant	0.15	216.7	0.0575	12.78	403.0	20.7	1.000*	102.825
WISN on Aux Ant	0.50	303.9	0.0806	16.12	--	--	--	--
WTC FM's on Master Ant	0.20	353.4	0.0937	46.85	375.1	4.6	1.000*	27.735
								35.45

* Calculation of ERP based on manufacturer's horizontal and vertical plane pattern data unless otherwise noted
 - Assumed value

Measurement Point 3

Operating Mode	Measured Data				Calculated Data					
	FCC MPE for GP/UC Exposure (mW/cm²)	Measured Electric Field Strength (V/m)	Equivalent Plane Wave Power Density (mW/cm²)	Percent FCC MPE for GP/UC Exposure	Slant Distance to Target (feet)	Horizontal Plane Relative Field Factor	Vertical Plane Relative Field Factor	Total ERP Toward Target (kW)	Equivalent Plane Wave Power Density (mW/cm²)	Percent FCC MPE for GP/UC Exposure
All Stations Off the Air	0.20	214.60	0.0569	28.45	---	---	---	---	---	---
WCBS-TV on Main Ant	0.20	164.90	0.0437	21.85	440.6	0.910	0.200	0.709	0.0007	0.35
WNBC on Main Ant	0.20	183.70	0.0487	24.35	516.1	0.880	0.350	1.651	0.0011	0.55
WNBC on Aux. Ant	0.20	181.40	0.0481	24.05	403.2	0.880	0.840	9.508	0.0105	5.25
WNYW on Main Ant	0.20	174.30	0.0462	23.10	516.1	0.840	0.450	2.486	0.0017	0.85
WNYW on Aux. Ant.	0.20	202.60	0.0537	26.85	401.9	1.000	0.820	11.700	0.0130	6.50
WABC-TV on Main Ant	0.20	197.90	0.0525	26.25	468.7	1.000*	0.500*	16.150	0.0132	6.60
WABC-TV on Aux. Ant	0.20	360.50	0.0956	47.80	395.6	0.980	1.000	62.042	0.0713	35.65
WWOR-TV on Main Ant	0.20	202.60	0.0537	26.85	483.4	1.000*	0.500*	15.425	0.0119	5.95
WWOR-TV on Aux. Ant.	0.20	419.40	0.1112	55.60	393.0	0.960	1.000	44.145	0.0514	25.70
WPIX on Main Ant	0.20	141.30	0.0375	18.75	499.6	0.800	0.200*	1.580	0.0011	0.55
WPIX on Aux. Ant	0.20	393.40	0.1044	52.20	394.4	0.980	1.000	56.568	0.0654	32.70
WNET on Main Ant	0.20	183.70	0.0487	24.35	483.4	1.000*	0.500*	15.075	0.0116	5.80
WNET on Aux. Ant.	0.20	252.10	0.0669	33.45	393.9	0.950	1.000	43.230	0.0501	25.05
WPXX-TV on Main Ant	0.38	221.40	0.0587	15.45	443.3	0.800	0.150*	40.608	0.0371	9.76
WNJU on Main Ant.	0.45	230.90	0.0612	13.60	421.3	1.000*	0.150*	102.825	0.1041	23.13
WDAI on Main Ant.	0.50	190.80	0.0506	10.12	---	---	---	---	---	---
WTC FAX's on Master Ant	0.20	270.90	0.0719	35.95	394.8	0.820	1.000*	27.071	0.0625	31.25

* Calculation of ERP based on manufacturer's horizontal and vertical plane pattern data unless otherwise noted

* Assumed value.

ENGINEERING REPORT
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GRAPHICAL COMPARISON OF MEASURED AND
CALCULATED EXPOSURE LEVELS

