

824 MHz 0-3.6 Spurious (WITHAMP)

February 09, 2001



824 MHz TDMA, 3.6 - 10 GHz Spurious (with AMP)

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836 MHZ TDMA 0-3.6 SPURIOUS (WITHOUT AMP)
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⁸³⁶ MHZ TDMA 0-3.5 GHZ SPURIOUS (WITHAMP)

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836 MHZ TDMA, 3.5 - 10 GHz Spurious (with AMP)



849 MHZ TDMA, 0-3.5 GHZ SPURIOUS (WITHOUT AMP)

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Test Sample: BST300 Cellular Booster with 1.9 GHz PCS Passive By-pass Circuitry



⁸⁴⁹ MHZ TDMA, 0-3.5 GHZ SPURIOUS (WITHAMP)

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⁸⁴⁹ MHZ TDMA, 3.5 – 10 GHZ SPURIOUS (WITHAMP)

The EUT complies with emission limitations for cellular (spurious) requirements.

TEST REPORT DATA							
Customer No: 1129	tomer No: 1129 MPBT No.: M34R2197 Tes						
TEST COMP./PART: SAMPLE 642	TEST DESCRIPTION: MAXIMUM PERMISSIBLETESTEXPOSUREEXPOSURE			ST CRITERIA: GENERAL POSURE LIMITS			
MIL-SPECS./STDS.:	FCC PART 1 SUBPART I, SECTION 1.1310	AL ✓ 3.:					
FACILITY: MPB Technologies Inc.	Test Engineer: D. Zanette	ERNAL:					
QA PERSONNEL:	OTHER: TEMP.: 15 C HUMIDITY: 20%						
TEST PROCEDURES	DETAILS/DEVIATIONS		PASS	Fail	INIT		
FCC Part 1 Subpart I	Frequency mW/cm ²						
Section 1.1310							
	0.3 – 1.34 (100)						
	1.24 – 30 (180/f ²)						
	30-300 0.2						
	$300-1500 f/1500 = 0.550 \text{ mW/cm}^2 \text{ or } 27.4 \text{ dBm/ c}$	m ²	✓		D.Z.		
	1500-10000 1						
	Note: Points and respective readings shown on next						
	f = 824 (Lowest Tx Frequency)						
NOTE: Glass Mount Cable loss = 3.6 dB at test frequency							
	Amplifier output : 2.5 watts or 33.99 dBm						
	With a cable loss of 3.6dB, drive power into antenna is1.09 watts or 30.39 dBm						
MPBT: D. ZANETTE	CUSTOMER: M.C.T. INC.	5	OF 6				



Antenna - Magnetic Mount With High Gain, Model SEM15 (4DBI)

Point	Reading (V/m)	INT./EXT.
1 –HEAD	8.0	INT.
2 – HEAD	9.1	INT.
3 – HEAD	5.4	INT.
4 – HEAD	6.6	INT.
1 – PELVIC	11.6	INT.
2 – PELVIC	10.1	INT.
3 – PELVIC	10.2	INT.
4 – PELVIC	7.6	INT.
5	7.0	EXT.
6	6.2	EXT.
7	5.6	EXT.
8	14.6	EXT.
9	13.4	EXT.
10	6.6	EXT.
11	7.4	EXT.
12	8.0	EXT.

Note: "X" refers to position of antenna. Car was a Honda Civic Dx. Point 8 (Worst Case) was achieved at from antenna. Limit = 27.4 dBm/cm^2

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 $Max \ Output = 27.0 V/m = 22.9 \ dBm/cm^2$ The EUT complies with maximum permissible exposure requirements.

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Antenna - Glass mount, Model SEM2, (5DB)



Point	Reading (V/m)	INT./EXT.
1	5.4	EXT.
2	4.4	EXT.
3	3.8	EXT.
4 – HEAD	21.2	INT.
5 – HEAD	21.8	INT.
6 – HEAD	23.1	INT.
7 – HEAD	18.4	INT.
4 – PELVIC	17.2	INT.
5 – PELVIC	11.6	INT.
6 – PELVIC	19.6	INT.
7 – PELVIC	12.8	INT.
8	7.2	EXT.
9	27.0	EXT.
10	7.4	EXT.
11	8.0	EXT.
12	4.6	EXT.

Note: "X" refers to position of antenna. Car was a Honda Civic Dx. Point 9 (Worst Case) was achieved at 30 cm from antenna. Limit = 27.4 dBm/cm^2

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 $Max \ Output = 27.0 V/m = 22.9 \ dBm/cm^2$ The EUT complies with maximum permissible exposure requirements.

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Appendix C

TEST EQUIPMENT REPORT

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Radiated Emissions

Asset	Characteristics	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date
4281	Biconilog Antenna	Antenna	LPB-2520/A	1048	Dec 30, 1999	Dec 30, 2000
		Research				
4989	Spectrum Analyzer	Hewlett Packard	8566B/462	2747A05263	Dec 30, 1999	Dec 30, 2000
4990	Quasi Peak Adapter	Hewlett Packard	85650A	2521A00815	Dec 30, 1999	Dec 30, 2000
4529	Mast/Antenna	Electro-	1050C	1086	Monitored	Monitored
	Control	Mechanics				
4861	Turn Table Control	Sunol	5C98V		Monitored	Monitored
5076	Software	Underwriters	V2.05	MC106399NK	Monitored	Monitored
		Laboratories		07147		

Conducted Emissions

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Asset	Characteristics	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date
4281	Biconilog Antenna	Antenna	LPB-2520/A	1048	Dec 30, 1999	Dec 30, 2000
		Research				
4989	Spectrum Analyzer	Hewlett Packard	8566B/462	2747A05263	Dec 30, 1999	Dec 30, 2000
4990	Quasi Peak Adapter	Hewlett Packard	85650A	2521A00815	Dec 30, 1999	Dec 30, 2000
4529	Mast/Antenna	Electro-	1050C	1086	Monitored	Monitored
	Control	Mechanics				
4861	Turn Table Control	Sunol	5C98V		Monitored	Monitored
5076	Software	Underwriters Laboratories	V5.0	MC106399NK 07147	Monitored	Monitored

Maximum Power/Harmonics/Spurious/Environmental

Asset	Characteristics	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date
002345	Field Probe Set	Amplifier Research	FP 2000	12439	Jul 30, 1999	Jul 30, 2000
002831	Spectrum Analyzer	Advantest	R4136	71220067	Dec 29, 1999	Dec 29, 2000
5019	Environ. Chamber	Thermotron Corp.	F-30-CHM-3	5093	Monitored	Monitored
002430	Bi-directional Coupler	Werlatone	03414	4341	Feb 4, 2000	Feb 4, 2001
003736	Signal Generator	Marconi Instruments	2022A	119062	Jul 21, 1999	Jul 21, 2000