

TEST REPORT DATA				
Customer No: 208		MPBT No.: M34R2460	Test Date: Feb 7, 2001	
TEST COMP./PART: SAMPLE 1758	TEST DESCRIPTION: EMISSION LIMITATIONS FOR CELLULAR – OCCUPIED BANDWIDTH		TEST CRITERIA:	
MIL-SPECS./STDS.:	FCC PART 90 SUBPART I, SECTION 90.210		QUAL: ✓ ENG.:	
FACILITY: MPB TECHNOLOGIES INC.	TEST ENGINEER: D. BECK		INTERNAL:	
QA PERSONNEL:	OTHER: TEMP.: 21 C HUMIDITY: 20 %			
TEST PROCEDURES	DETAILS/DEVIATIONS	PASS	FAIL	INIT
	The EUT must meet the specifications of MASK G			
	1) f_c to $(f_c \pm 5 \text{ kHz})$ 83 10log $F_d/5$ dB	PASS		
	2) Freq removed from the center by $f_d > 10 \text{ KHz}$, but no more than 250% of authorize Bandwidth at leasted 116 dB Log $f_d/6.1$ dB or 50=Log (P)dB or 70 dB or 70 dB which ever is less	PASS		
	3) Any Freq removed from f_c by more than 250 % at least 43+Log (P)	PASS		
	Note: dB refers to attenuation from the mean power of the unmodulated carrier			
	<u>OR</u>			
	For equipment which does not perform modulation and only			
	amplifies the RF signal, pass/fail criteria shall be based on the			
	following:			
	a) The 20 dB bandwidth of the modulated carrier shall be the same (input signal vs. output signal).	✓		D.B.
	b) The difference of the amplitudes between the input signal and the output signal shall remain consistent (+/- 0.5 dB), for the 20 dB bandwidth of the modulated carrier.	✓		D.B.
MPBT: D.BECK		CUSTOMER: M.C.T. INC.		

2.6 MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Test Summary	
Test Lab: MPB Technologies Inc. Ottawa Test Personnel: D. BECK Test Date: February 7, 2001	Product: BST301 iDEN Motorola Trunking Booster

Test Description													
Objectives/Criteria	Specifications												
For devices to be operated more then 20 cm from the users body, the equipment shall not exceed that listed in the table based on an averaging time of 30 minutes and that the limit is for the general population/uncontrolled exposure.	Power Density Requirements, FCC Part 1.1310 <table> <tr> <td>Frequency</td><td>mW/cm²</td></tr> <tr> <td>0.3 – 1.34</td><td>(100)</td></tr> <tr> <td>1.24 – 30</td><td>(180/f²)</td></tr> <tr> <td>30-300</td><td>0.2</td></tr> <tr> <td>300-1500</td><td>f/1500</td></tr> <tr> <td>1500-10000</td><td>1</td></tr> </table>	Frequency	mW/cm ²	0.3 – 1.34	(100)	1.24 – 30	(180/f ²)	30-300	0.2	300-1500	f/1500	1500-10000	1
Frequency	mW/cm ²												
0.3 – 1.34	(100)												
1.24 – 30	(180/f ²)												
30-300	0.2												
300-1500	f/1500												
1500-10000	1												
Test Result: PASS													
Comments: Limit distance is at 8.8 inches from antenna. Statement to be incorporated shall read as follows: The glass mount antenna must be mounted in a location that will provide a minimum of 12 inches separation between it and vehicle occupants in order to meet the MPE (Maximum Permissible Exposure) limit and requirements in accordance with FCC CFR 47 Part 1.1301. The maximum permissible power output limit is at 8.8 inches from the antenna, this is equivalent to 0.557mW/cm². Max Output measured at 806 MHz was 0.194 mW/cm² at 12 inches. Refer to Test Report Data sheets for more detail. All measurements were performed while the EUT was transmitting a CW signal which is deemed to be worst case.													

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2.4 EMISSION LIMITATIONS FOR CELLULAR – OCCUPIED BANDWIDTH

Test Summary	
Test Lab: MPB Technologies Inc. Ottawa Test Personnel: D. BECK Test Date: February 7, 2001	Product: BST301 iDEN Motorola Trunking Booster

Test Description	
Objectives/Criteria	Specifications
For an W7W emission mask, the mean power of emissions must be attenuated below that specified in mask (b), or mask (c). Measurement bandwidths are to be 100 Hz for any frequency removed from the carrier less than 5 kHz and 100 kHz for all else. For equipment which does not perform modulation and only amplifies the RF signal, pass/fail criteria shall be based on the following: a) The 20 dB bandwidth of the unmodulated carrier shall be the same (input signal vs. output signal). b) The difference of the amplitudes between the input signal and the output signal shall remain consistent (+/- 0.5 dB), for the 20 dB bandwidth of the unmodulated carrier.	FCC PART 90: 1996, Subpart I Section 90.210 Mask G 1) f_c to $(f_c \pm 5 \text{ kHz})$ $83 + 10 \log F_d/5$ dB 2) Freq removed from the center by $f_d > 10 \text{ KHz}$, but no more than 250% of authorize Bandwidth at least $116 \text{ dB} + \log f_d/6.1$ dB or $50 = \log(P) \text{ dB}$ or 70 dB or 70 dB which ever is less 3) Any Freq removed from f_c by more than 250 % at least $43 + \log(P)$ Note: dB refers to attenuation from the mean power of the unmodulated carrier. f_c refers to frequency of the carrier f_d refers to displacement frequency from the carrier in kHz P refers to the mean power of unmodulated carrier wave.

Test Result: PASS
Comments: Refer to Test Report Data sheets for more detail. Pages 40,41,42,50,51,52,53