



MOTOROLA

Date: .September 21, 2004

Subject: Request for additional information regarding FCC ID: IHDT6DZ1 (Portable PCS GSM transceiver with embedded Bluetooth)

Reference:

Application Received:	07/27/2004
Correspondence Reference Number:	240827A.IHD
Confirmation Number:	TC4263 & TC4264
Date of Original Email:	08/27/2004

Prepared by:

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QUESTIONS AND RESPONSES FOLLOW:

Bluetooth Application:

1. Please provide tabulated radiated emission data for the bands between 1 and 12 GHz (it was provided for the other bands, but not these). Please be sure to include radiated emission data from the restricted band at 2483.5 - 2500 MHz (the spurious conducted emission plots show relatively strong spurs in this band).

Response:

Please refer to the revised Bluetooth test report submitted on 9-21-04.

2. Please submit the block diagram and schematics for the Bluetooth transmitter.

Response:

In the original filing, the Bluetooth block diagram is located on page 3 of exhibit 4 and the schematic is located on page 6 of exhibit 5 (lower right corner on each exhibit). Please refer to the attached supplemental diagrams.

PCS GSM application:

3. Please verify that the following is a typo: page 5 of the SAR report- the Recommended Limit for the Verification test is listed as 39.7, however, the Dipole Characterization Certificate lists the Recommended Limit ("Grand Average") as 40.7.

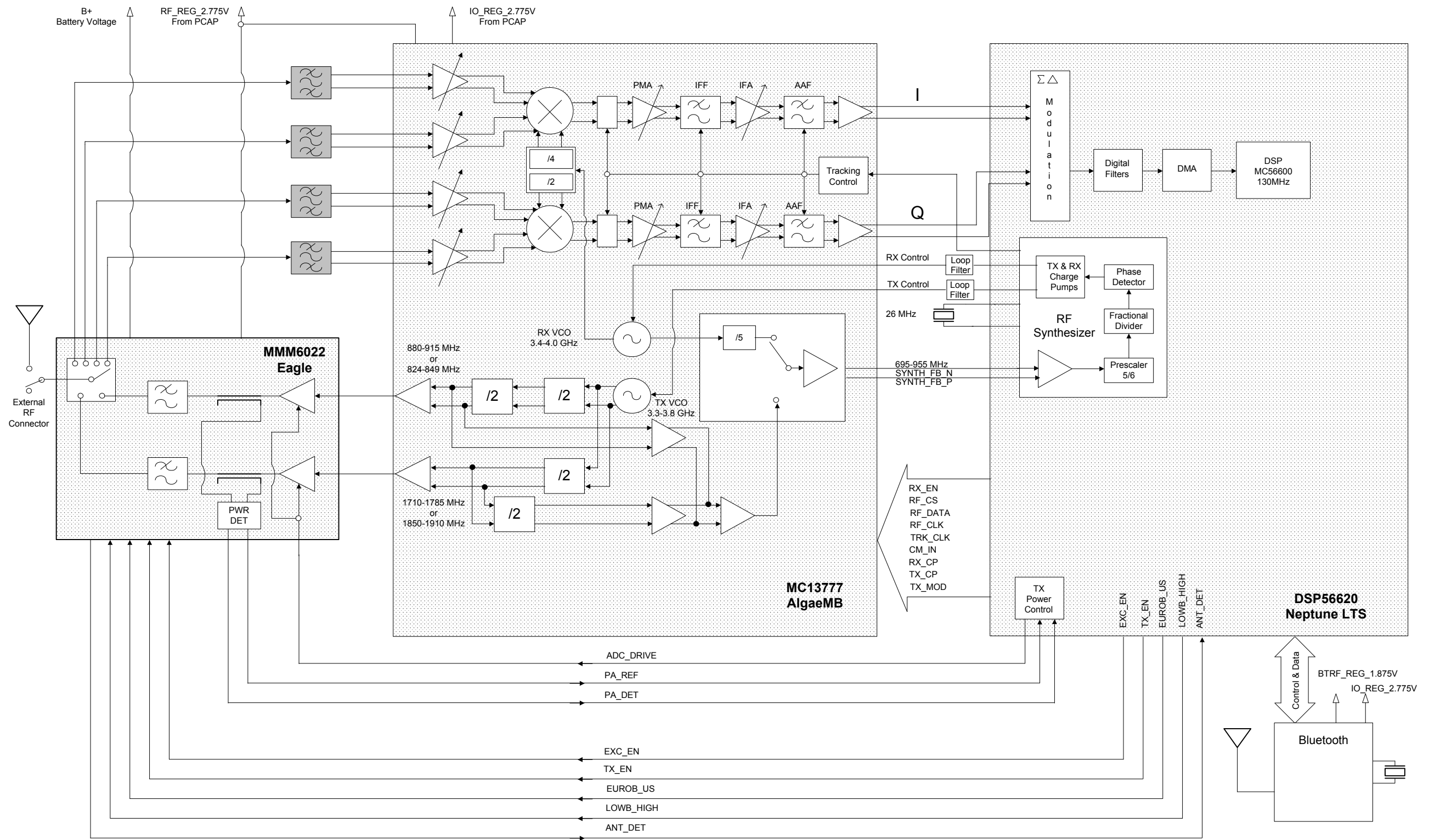
Response:

Please refer to the supplement to the SAR report submitted on 9-21-04.

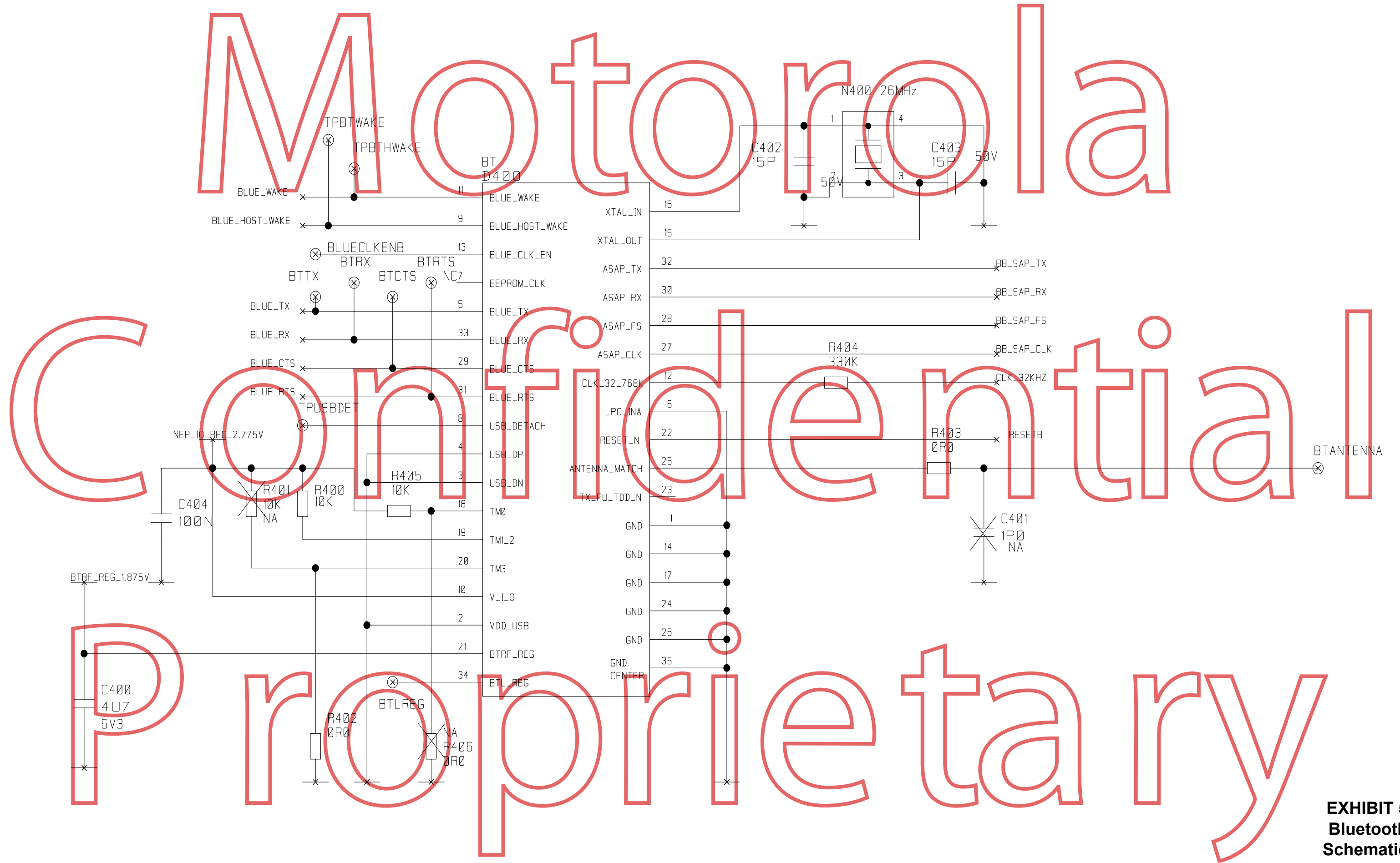
AMENDMENT TO APPLICATION:

Since the original application, the antenna matching values have been optimized for improved receiver performance (TIS). Testing indicates degradation in radiated spurs as reported in the following chart. No degradation is reported for either SAR or conducted emissions.

RF



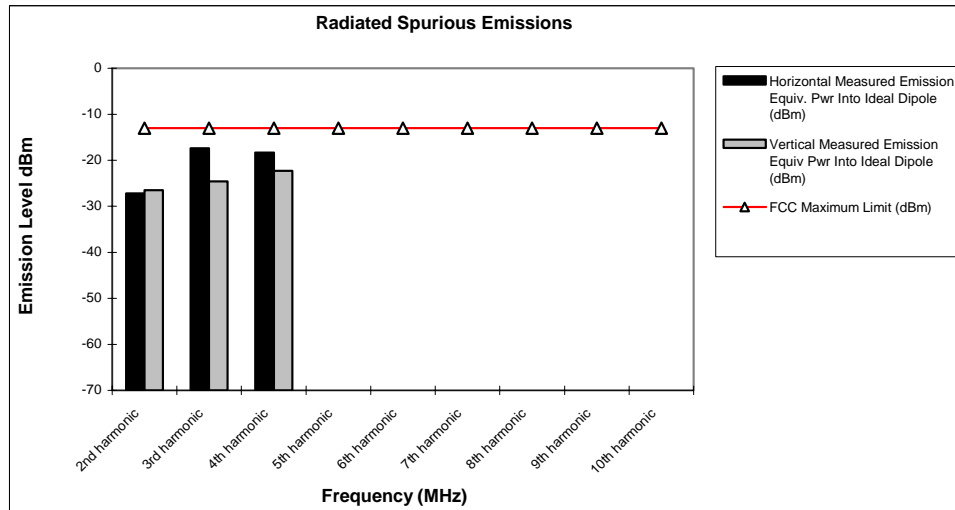
Sys Signal Name	EXC_EN	LOWB_HIGH	EUROB_US	Radio Mode	
Eagle Pin	TX_ANT_EN	LOWB_HIGH	EUROB_US		
	0	0	0	RX EGSM	Low Current State
	0	0	1	RX CEL	
	0	1	0	RX DCS	Low Current State
	0	1	1	RX PCS	
	1	0	0	TX EGSM	
	1	0	1	TX CEL	
	1	1	0	TX DCS	
	1	1	1	TX PCS	



Measurement Results
Modulation: GSM 1900

Radiated Spurious and Harmonic Emissions

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
2nd harmonic	-13	-27.2	-26.5
3rd harmonic	-13	-17.4	-24.6
4th harmonic	-13	-18.3	-22.3
5th harmonic	-13	*	*
6th harmonic	-13	*	*
7th harmonic	-13	*	*
8th harmonic	-13	*	*
9th harmonic	-13	*	*
10th harmonic	-13	*	*



Notes:

- * Indicates the spurious emission could not be detected due to noise limitations or ambients.
- Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
- The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.



MOTOROLA

September 15, 2004

Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT6DZ1)

Prepared by:

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Summary of FCC request for additional information

There was a request for additional information regarding Motorola's SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56DZ1). The requested information is addressed below in the same numbering sequence received.

3. Please verify that the following is a typo: page 5 of the SAR report- the Recommended Limit for the Verification test is listed as 39.7, however, the Dipole Characterization Certificate lists the Recommended Limit ("Grand Average") as 40.7.

RESPONSE: Motorola confirms that the Recommended Limit for the Verification test should have been 40.7 W/kg as listed in the Dipole Characterization Certificate. A corrected table is shown below.

<i>f</i> (MHz)	Description	SAR (W/kg), 1gram	Dielectric Parameters		Ambient Temp (°C)	Tissue Temp (°C)
			ϵ_r	σ (S/m)		
1800	Measured, 7/16/2004	40.2	39.4	1.37	20.0	19.5
	Measured, 7/22/2004	39.9	39.4	1.35	20.0	19.3
	Recommended Limits	40.7	40.0 ±5%	1.40 ±5%	18-25	18-25