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Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDP56KZ2)

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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 IHDP56KZ2). The requested information is addressed below in the same numbering sequence received.

Q3. Please provide Average conducted output power measurement data for the DTS at the various data rates and channels specified in the FCC IEEE 802.11 SAR testing procedures. Please use this data to determine the required data rates to be tested for each channel and submit any missing SAR data as well.

Response:

R3. 802.11b Wi-Fi conducted power measurements are provided in table S1, and test results are provided in tables S2 through S7 below. Additional testing per Q3 above is provided for the worst-case SAR position each from among head-adjacent and body-worn conditions.

Power measurements were performed per the FCC's 802.11 SAR testing procedure (FCC KDB 248227). Below is the complete table of RF power for Wi-Fi 802.11 b/g modes. Wi-Fi SAR testing was performed with the transmitter data rate set at 1 Mbps unless otherwise noted.

Band	Channel	Conducted Power (dBm) for 802.11b Mode Data Rates				Conducted Power (dBm) for 802.11g Mode Data Rates							
		1 Mbps	2 Mbps	5.5 Mbps	11 Mbps	6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
Wi-Fi 2450	1	21.60	21.50	22.90	21.45	17.16	17.32	17.46	17.43	17.37	17.58	17.86	16.06
	6	21.90	20.67	21.53	21.53	16.27	16.32	16.52	16.48	16.43	16.41	17.16	15.24
	11	21.34	22.08	22.25	21.54	16.63	16.94	16.73	16.88	17.29	17.40	17.44	15.32

Table S1: Conducted power measurement results for 802.11b/g modes

Wi-Fi 802.11b Mode, 2450 Mhz Band, Left Head Cheek Position								
Data Rate	Description	Conducted Output Power (dBm)	Temp (°C)	Drift (dB)	10 g SAR value		1 g SAR value	
					Measured (W/kg)	Extrapolated (W/kg)	Measured (W/kg)	Extrapolated (W/kg)
1 Mbps	Channel 1	21.60						
	Channel 6	21.90	20.4	-0.163	0.123	0.13	0.265	0.28
	Channel 11	21.34						
2 Mbps	Channel 1	21.50						
	Channel 6	20.67						
	Channel 11	22.08						
5.5 Mbps	Channel 1	22.90						
	Channel 6	21.53						
	Channel 11	22.25						

Table S2: SAR measurement results at the highest possible output power, measured in a head cheek position against the ICNIRP and ANSI SAR Limit.

Wi-Fi 802.11b Mode, 2450 Mhz Band, Right Head Cheek Position								
Data Rate	Description	Conducted Output Power (dBm)	Temp (°C)	Drift (dB)	10 g SAR value		1 g SAR value	
					Measured (W/kg)	Extrapolated (W/kg)	Measured (W/kg)	Extrapolated (W/kg)
1 Mbps	Channel 1	21.60	19.6	-0.129	0.210	0.22	0.485	0.50
	Channel 6	21.90	20.3	0.194	0.191	0.19	0.440	0.44
	Channel 11	21.34	19.6	-0.087	0.221	0.23	0.518	0.53
2 Mbps	Channel 1	21.50						
	Channel 6	20.67						
	Channel 11	22.08	19.6	0.020	0.210	0.21	0.49	0.49
5.5 Mbps	Channel 1	22.90	19.6	0.008	0.193	0.19	0.443	0.44
	Channel 6	21.53						
	Channel 11	22.25	19.6	-0.153	0.210	0.22	0.486	0.50

Table S3: SAR measurement results at the highest possible output power, measured in a head cheek position against the ICNIRP and ANSI SAR Limit.

Wi-Fi 802.11b Mode, 2450 Mhz Band, Left Head 15° Tilt Position								
Data Rate	Description	Conducted Output Power (dBm)	Temp (°C)	Drift (dB)	10 g SAR value		1 g SAR value	
					Measured (W/kg)	Extrapolated (W/kg)	Measured (W/kg)	Extrapolated (W/kg)
1 Mbps	Channel 1	21.60						
	Channel 6	21.90	20.2	0.466	0.016	0.02	0.034	0.03
	Channel 11	21.34						
2 Mbps	Channel 1	21.50						
	Channel 6	20.67						
	Channel 11	22.08						
5.5 Mbps	Channel 1	22.90						
	Channel 6	21.53						
	Channel 11	22.25						

Table S4: SAR measurement results at the highest possible output power, measured in a head 15° Tilt position against the ICNIRP and ANSI SAR Limit.

Wi-Fi 802.11b Mode, 2450 Mhz Band, Right Head 15° Tilt Position								
Data Rate	Description	Conducted Output Power (dBm)	Temp (°C)	Drift (dB)	10 g SAR value		1 g SAR value	
					Measured (W/kg)	Extrapolated (W/kg)	Measured (W/kg)	Extrapolated (W/kg)
1 Mbps	Channel 1	21.60						
	Channel 6	21.90	20.3	0.146	0.017	0.02	0.033	0.03
	Channel 11	21.34						
2 Mbps	Channel 1	21.50						
	Channel 6	20.67						
	Channel 11	22.08						
5.5 Mbps	Channel 1	22.90						
	Channel 6	21.53						
	Channel 11	22.25						

Table S5: SAR measurement results at the highest possible output power, measured in a head 15° Tilt position against the ICNIRP and ANSI SAR Limit.

Wi-Fi 802.11b Mode, 2450 Mhz Band, Body-Worn; Front of Phone 15 mm from Phantom								
Data Rate	Description	Conducted Output Power (dBm)	Temp (°C)	Drift (dB)	10 g SAR value		1 g SAR value	
					Measured (W/kg)	Extrapolated (W/kg)	Measured (W/kg)	Extrapolated (W/kg)
1 Mbps	Channel 1	21.60						
	Channel 6	21.90	20.1	-0.172	0.031	0.03	0.053	0.06
	Channel 11	21.34						
2 Mbps	Channel 1	21.50						
	Channel 6	20.67						
	Channel 11	22.08						
5.5 Mbps	Channel 1	22.90						
	Channel 6	21.53						
	Channel 11	22.25						

Table S6: SAR measurement results at the highest possible output power, measured in a body-worn position against the ICNIRP and ANSI SAR Limit.

Wi-Fi 802.11b Mode, 2450 Mhz Band, Body-Worn; Back of Phone 15 mm from Phantom								
Data Rate	Description	Conducted Output Power (dBm)	Temp (°C)	Drift (dB)	10 g SAR value		1 g SAR value	
					Measured (W/kg)	Extrapolated (W/kg)	Measured (W/kg)	Extrapolated (W/kg)
1 Mbps	Channel 1	21.60	19.7	-0.204	0.099	0.10	0.188	0.20
	Channel 6	21.90	20.4	0.106	0.082	0.08	0.153	0.15
	Channel 11	21.34	19.7	0.062	0.099	0.10	0.188	0.19
2 Mbps	Channel 1	21.50						
	Channel 6	20.67						
	Channel 11	22.08	19.7	-0.248	0.104	0.11	0.195	0.21
5.5 Mbps	Channel 1	22.90	19.7	-0.053	0.090	0.09	0.171	0.17
	Channel 6	21.53						
	Channel 11	22.25	19.7	0.051	0.102	0.10	0.195	0.20

Table S7: SAR measurement results at the highest possible output power, measured in a body-worn position against the ICNIRP and ANSI SAR Limit.