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RF Exposure Information for IPH-01102291

In order to maintain consistency and simplify procedures, the SAR thresholds considered in FCC rules are based on conducted power according to the source-based time averaging requirements of 2.1093(d)(5). These considerations are limited to antenna with gains <6dBi, and apply to this product. Because radiated ERP and EIRP output powers have been determined via measurement, radiated power results have been used and will reflect even more accurate consideration with regard to the limit thresholds.

Bluetooth RF Exposure Information

The included Bluetooth module is not functionally coupled to the GPRS/EDGE radio, and is intended for use as a generic handsfree speakerphone device paired to a customer's separate external handset. Since the Bluetooth radio is not functionally coupled to the integrated GPRS/EDGE radio, it may or may not operate simultaneously, as this would be a matter of chance.

The Bluetooth radio power is exceedingly low (measured at 6.4dBm), so this falls well under the threshold established by

Output power $\leq 60/f(\text{GHz})$ mW

6.4dBm = 4.4mW < $60/2.402$ mW = 25 mW

4.4 mW < 25mW, so the Bluetooth radio is exempt.

GPRS/EDGE Radio Information

This device employs infrequent short duration data communications over GPRS and EDGE using Multislot Class 10 (2/8 timeslots), and does not support GSM voice.

The primary radio is also exempt under the formula: Output power $\leq 60/f(\text{GHz})$ mW

Based on the ERP of 27.4 dBm = 549.6mW for operation of GPRS/EDGE in the GSM850 band, and maximum EIRP of 26.6 dBm = 457.1mW for operation of GPRS/EDGE in the GSM1900 band, the following maximum transmission time correction can be applied to establish this exemption:

For GPRS/EDGE in the GSM 850 band:

The device can transmit for a maximum of 2/8 timeslots for 15 seconds during a 3 minute time period. Adding a 2x safety margin, we will calculate the power for 2/8 timeslots for 30 seconds in 3 minutes. (4.2% duty cycle).

Given an ERP of 27.4dBm, and 2.14 dB of measurement system loss, the EIRP should be 27.4dBm + 2.14dB = 29.54dBm = 900 mW. 4.2% of 900mW = 37.8 mW.

Comparing this to the formula Output power $\leq 60/f(\text{GHz})$ mW, the calculation is as follows:

37.8 mW < $60/(0.842)$ mW

37.8 mW < 71.3 mW.

The radio is exempt from SAR under this formula when operating in the GSM 850 band.

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For GPRS/EDGE in the GSM 1900 band:

The device can transmit for a maximum of 2/8 timeslots for 15 seconds during a 3 minute time period. Adding a 2x safety margin, we will calculate the power for 2/8 timeslots for 30 seconds in 3 minutes. (4.2% duty cycle).

Given the EIRP of 457.1 mW, 4.2% of 457.1mW = 19.2 mW.

Comparing this to the formula Output power $\leq 60/f(\text{GHz})$ mW, the calculation is as follows:

$19.2 \text{ mW} < 60/(1.850) \text{ mW}$

$19.2 \text{ mW} < 32.4 \text{ mW}$.

The radio is exempt from SAR under this formula when operating in the GSM 1900 band.

Signed:



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