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1.0 Maximum Permissible Exposure Evaluation (Supplements the test report.)

The measured power is considered for the intended use of the device and resulting RF exposure to the user.

1.2 Criteria

Section Reference	Date
447498 D01 General RF Exposure Guidance v06	8 Feb 2018

1.3 Procedure

Using measurement of peak power and considering the intended application, determine the permissible exposure level, applicability of exclusion, or whether additional exposure tests (SAR) are indicated. When applicable justify conclusion for selected exposure level and separation distance.

1.4 Power to Exposure Calculation

Power is determined by conducted measurement. SAR exemption method is applied for 20 cm spacing with a co-located 2-band LTE cellular modem. General public/uncontrolled exposure assumed.

Table 1.4.1 Power Calculation for Exposure (Highest frequency 0.9185GHz)				
Measured Conducted Power dBm	Source Duty Cycle Factor dB	Antenna Gain dBi	Calculated EIRP dBm	EIRP In Linear Terms mW
14.0	-27.1	2.15	-11.0	0.08

Regarding LTE modem. See exhibit **18984 15 RF Exposure Report LTE Modem** page 8, table of section 5 Measurement Summary.

LTE Band IV, 0.22W of 3 Watt limit; using $0.22/3 = 7.3\%$ of exposure limit.

LTE Band XIII, 0.022W of 1.5 Watt limit; using $0.022/1.5 = 1.5\%$ of exposure limit.

Total for both bands active (assumed as worse-case): 8.8% of limit.

1.5 SAR Exemption Calculation – FCC

Applicable requirement: KDB 447498 Clause 4.3.1 Section 1

Calculation (max power including tune up tolerance = 0.08 mW):

$$[(0.08 \text{ mW})/(5 \text{ mm})] \cdot [\sqrt{0.9185 \text{ (GHz)}}] = 0.02$$

$0.02 \leq 3.0$ or represents $0.02/3 = 1\%$ of exposure limit.

1.6 Combined Exposure

Total % of exposure = $8.8\% + 1\% = 9.8\%$.

Therefore, the device meets the applicable FCC SAR exemption requirements.

Signed:

A handwritten signature in black ink, appearing to read "Eric Lifsey". The signature is stylized with a large, looping "E" and "L".

Eric Lifsey
