



## **Exhibit: RF Exposure – FCC**

FCC ID: AS57705SARHMC-2

## RF Exposure - FCC

The EUT transmits in several bands as depicted in the table below.

Table 1. Worst-Case Scenario of Maximum Power Output – dBm/10MHz

Radio Type	Band	47 CFR Rule Part	Frequency (MHz)	Max Power (dBm)	Max Power (mW)
LTE	48	96	3560.0	16.87	48.64
			3557.5	18.03	63.53
			3695.0	20.42	110.2
			3697.5	19.38	86.70

### Radiofrequency Radiation Exposure Evaluation: Mobile Devices

Mobile devices shall be evaluated for RF radiation exposure according to the provisions of [FCC §2.1091 \(d\) \(2\)](#) (with Amendment 85 [FR18146](#), April 1, 2020) and the MPE guidelines identified in [FCC §1.1310](#).

As per FCC §1.1310 Table 1(B), the limit for Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields for General Population/Uncontrolled Exposure in the frequency range of:

✓ 1.5GHz to 100GHz is 1.0 mW/cm<sup>2</sup>.

The power density can be calculate using the formula:

$$P_d = (P_{out} * G) / (4 * \pi * R^2)$$

where,

f = frequency in MHz

P<sub>d</sub> = Power density in mW/cm<sup>2</sup>

P<sub>out</sub> = Conducted output power to antenna in mW

G = Numeric Antenna Gain

Pi = 3.1416

R1 (Category A) = 20 cm

R2 (Category B) = 20 cm

R3 (Category B) = 50 cm

G1 (Category A) = 7 dBi

G2 (Category B) = 16 dBi

G3 (Category B) = 24 dBi

**MPE Calculation:**

For user general use at 20 cm distance, the maximum conducted output power of 20.42 dBm, with up to 7 dBi antenna gain, the EUT complies with limits of General Population/Uncontrolled Exposure according to Table 2 for Category A operation, and Table 3 for Category B applications that have antennas with between 7 dBi and 16 dBi antenna gain.

For category B applications with more than 16 dBi antenna gain, for user general use at 50 cm distance, the maximum conducted output power of 20.42 dBm allows for up to 24 dBi antenna gain the EUT complies with limits of General Population/Uncontrolled Exposure according to Table 4 during Category B operation.

**Table 2. Uncontrolled Exposure at 20cm distance and 20.4 dBm Power Output**

Type	Lower (MHz)	Upper (MHz)	Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Calculated (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Pass/Fail
LTE	3560	3670	20.42	7.0	27.42	552.1	0.110	1.00 <Note 1>	Pass

Note 1. Limit according to the General Uncontrolled Exposure: Table 1 Clause 1.1310(e)(2)  
 Note 2. Although the device incorporates FCC ID: N7NMC74B, they cannot transmit simultaneously by design, therefore co-location is not required. For any operation of the incorporated module under the terms of its grant, the RF exposure conditions per that certification apply.

The EUT meets the requirements in Category A applications at 20 cm.

**Table 3 Uncontrolled Exposure at 20cm distance and 20.4 dBm Power Output**

Type	Lower (MHz)	Upper (MHz)	Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Calculated (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Pass/Fail
LTE	3560	3670	20.42	16.0	36.42	4385.3	0.87	1.00 <Note 1>	Pass

Note 1. Limit according to the General Uncontrolled Exposure: Table 1 Clause 1.1310(e)(2)  
 Note 2. Although the device incorporates FCC ID: N7NMC74B, they cannot transmit simultaneously by design, therefore co-location is not required. For any operation of the incorporated module under the terms of its grant, the RF exposure conditions per that certification apply.

The EUT meets the requirements in category B applications with gains up to 16 dBi at 20 cm.

**Table 4 Uncontrolled Exposure at 50cm distance and 20.4 dBm Power Output**

Type	Lower (MHz)	Upper (MHz)	Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Calculated (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Pass/Fail
LTE	3560	3670	20.42	24.2	44.62	28973.4	0.92	1.00 <Note 1>	Pass

Note 1. Limit according to the General Uncontrolled Exposure: Table 1 Clause 1.1310(e)(2)  
 Note 2. Although the device incorporates FCC ID: N7NMC74B, they cannot transmit simultaneously by design, therefore co-location is not required. For any operation of the incorporated module under the terms of its grant, the RF exposure conditions per that certification apply.

The EUT meets the requirements in category B applications with gains up to 24.2 dBi at 50 cm.