

SAR-based exemption for FCC-ID: 2ACQM-EDG3-0160-A

Regarding the rule changes per FCC 19-126 Order

Title 47 §1.1307(b)(3)(i):

(3) Determination of exemption. (i) For single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if:

(A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

Maximum time-averaged power exemption calculation

Frequency [MHz]	Maximum peak value @ 3m [dB μ V/m]	Maximum power EIRP [mW]	Duty cycle [%]	Maximum time-averaged power [mW]
2404.053	95.5	1.06	4.62	0.049
2441.844	95.5	1.06	4.62	0.049
2479.285	95.9	1.17	4.62	0.054

All values of maximum time-averaged power are well below 1 mW.

Declaration

I hereby declare that the device with FCC-ID 2ACQM-EDG3-0160-A was determined to be exempt from routine evaluation as per Title 47 §1.1307(b)(3)(i)(A).

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Vienna, Austria, 18th August 2021

