

SAR Test exclusion documentation according to FCC KDB 447498

Report identification number: 1-9421/19-01-10 Exclusion (FCC)

Product:	Remote Control Unit, (BLE Hub) - EB5H-RN1
FCC ID:	N5F-EB5H

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EUT technologies:

Technologies:	Max. rated power: (AVG)	Max. gain:
Bluetooth LE 2450 MHz	Declared: max 9.5 dBm	< 0 dBi

Note: Bluetooth LE test results see CTC advanced test report 1-9421/19-01-03

SAR test exclusion according to KDB447498 (General RF Exposure Guidance v06)

Equation from Chapter 4.3.1: Standalone SAR test exclusion considerations page 11 and ff.

(1) Standalone SAR test exclusion for 100 MHz to 6 GHz at test separation distances $\leq 50\text{mm}$

$$(\text{Threshold}_{1\text{-g};10\text{-g}}) \times d_{\text{separation}} / f^{0.5}$$

where

Threshold_{1-g;10-g} is 3 for 1-g; 7.5 for 10-g

d_{separation} is the min. test separation distance; 5mm is used if the distance is less

f is the RF channel transmit frequency

The table below gives the calculated maximal power that could be used for source based time averaged conducted or radiated power, adjusted for tune up tolerance. If this is at or below the calculated value the DUT is exempted from SAR evaluation.

frequency [MHz]	d _{separation} [mm]	Threshold _{1-g}	Powerlimit [mW]	P _{max-declared}		Exclusion
				[dBm]	[mW]	
2450.00	5	3	9.58	9.50	8.91	yes

The limit above is defined for body worn application and therefore cover all use cases.