

Limits for Maximum Permissible Exposure (MPE)

SAR EVALUATION

According to KDB 447498 D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

Limits for SAR evaluation

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$\left[\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation¹⁷
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

RF Exposure Evaluation

2BOTU-MUS001

Measurement Result

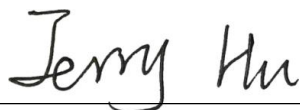
Operation Mode:	Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
				(dBm)	(mW)		
GFSK (1Mbps)	Lowest (2402MHz)	-6.69	-7±1	-6	0.251	0.0778	3.0
	Middle (2440MHz)	-7.82	-8±1	-7	0.200	0.0624	
	Highest (2480MHz)	-8.83	-9±1	-8	0.158	0.0498	
GFSK (2Mbps)	Lowest (2402MHz)	-6.83	-7±1	-6	0.251	0.0778	
	Middle (2440MHz)	-7.95	-8±1	-7	0.200	0.0624	
	Highest (2480MHz)	-9.04	-10±1	-9	0.129	0.0406	
Conclusion: the calculated value ≤3.0, SAR is exempted.							
Remark: The Max Conducted Peak Output Power data refer to report Report No.: LP250400205C01-05							

RF Exposure Evaluation

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Operation Mode:	Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
				(dBm)	(mW)		
GFSK	Lowest (2402MHz)	-6.96	-7±1	-6	0.251	0.0778	3.0
	Middle (2441MHz)	-8.07	-9±1	-8	0.158	0.0494	
	Highest (2480MHz)	-9.11	-10±1	-8	0.158	0.0498	
Pi/4-DQPSK	Lowest (2402MHz)	-5.18	-6±1	-5	0.316	0.0979	
	Middle (2441MHz)	-6.29	-7±1	-6	0.251	0.0784	
	Highest (2480MHz)	-7.31	-8±1	-7	0.200	0.0630	
8DPSK	Lowest (2402MHz)	-4.57	-5±1	-4	0.398	0.1234	
	Middle (2441MHz)	-5.69	-6±1	-5	0.316	0.0987	
	Highest (2480MHz)	-6.86	-7±1	-6	0.251	0.0790	
Conclusion: the calculated value ≤3.0, SAR is exempted.							
Remark: The Max Conducted Peak Output Power data refer to report Report No.: LP250400205C01-04							

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Date: 2025-05-27

Approved & Authorized Signer:



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Issue Date: 2025-06-14

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