

Declaration of RF Exposure Compliance for SAR exclusion

ATTESTATION:

I attest that the radiocommunication apparatus meets the exclusion from the routine evaluation limits in Section 4.3 of KDB 447498 D01 v06; that the Technical Brief was prepared and the information contained therein is correct; that the device evaluation was performed or supervised by me; that applicable measurement methods and evaluation methodologies have been followed; and that the device meets the SAR limits of FCC part 1.1310

Signature:**Date:****April 15, 2019****NAME (Please print or type):****Seungyong Shin****TITLE (Please print or type):****Technical Manager****COMPANY (Please print or type):****Nemko Korea Co.Ltd.****Model Number (Please print or type):****SM-R370****FCC ID (Please print or type):****A3LSMR375****Signature:****Date:****April 15, 2019****NAME (Please print or type):****SUNLYEONG HWANG****TITLE (Please print or type):****Principal Engineer****COMPANY (Please print or type):****Samsung Electronics Co., Ltd.****Model Number (Please print or type):****SM-R370****FCC ID (Please print or type):****A3LSMR375**

Note: The submission of this document is only required if the device meets the exemption limits for the routine evaluation in Section 4.3 of KDB 447498 D01 v06

Technical Brief - Exclusion from Routine Evaluation Limits – SAR Evaluation

As detailed in Section 4.3 of KDB 447498 D01 v06, the information contained in this RF exposure technical brief is limited to information that demonstrates how the output power of the device was derived to justify the exclusion from the routine evaluation.

The output power and operating frequency of the device are:

Frequency	Power		Result*
	Maximum conducted output power		
2402 MHz	-2.25 dBm	0.60 mW	0.185
2480 MHz	-2.68 dBm	0.54 mW	0.170
The Maximum conducted output power was derived from measurement of output power at the antenna port.			

The Minimum Separation distance: 5mm

*** SAR Test Exclusion calculation result for 10-g extremity SAR.**

- SAR Test Exclusion Threshold is determined according to the following equation as specified KDB 447498 D01 4.3.1).
- 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:

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

Conclusion

As the SAR Test Exclusion calculation result is below SAR test exclusion thresholds, the SAR evaluation is not required.

Technical Brief - Exclusion from Routine Evaluation Limits – SAR Evaluation

As detailed in Section 4.3 of KDB 447498 D01 v06, the information contained in this RF exposure technical brief is limited to information that demonstrates how the output power of the device was derived to justify the exclusion from the routine evaluation.

The output power and operating frequency of the device are:

PN553 for Tagging Communication			
Frequency	Power		Limit*
	Field strength	EIRP	
13.56 MHz	30.5 dBuV/m @ 3m	3.37×10^{-7} mW	592 mW
■ The eirp was derived from a field strength measurement of the fundamental signal which was converted to an eirp using the free space equation $E = \sqrt{(30PG)/d}$.			

The Minimum Separation distance: 5mm

*** SAR Test Exclusion calculation result for 10-g extremity SAR.**

- SAR Test Exclusion Threshold is determined according to the following equation as specified KDB 447498 D01 4.3.1) and Appencix C.

Conclusion

As the SAR Test Exclusion calculation result is below SAR test exclusion thresholds, the SAR evaluation is not required.