

FCC SAR Exemption per KDB 447498


KDB 447498 D01 General RF Exposure Guidance v06 (October 23, 2015)

1. Declaration of RF exposure compliance for exemption from routine evaluation limits

FCC ID:	2ACER1001112579																																
Model number:	1001112579																																
Manufacturer:	Kongsberg Automotive																																
4.3.1. Standalone SAR test exclusion considerations:	<p>During normal operation, user extremities can come within 20 cm of the internal antenna and therefore product is considered as "Portable".</p> <p>For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):</p> <p>1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \log(100/f(\text{MHz}))]$</p> <p>2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$</p> <p>Appendix C SAR Test Exclusion Thresholds for < 100 MHz and < 200 mm Approximate SAR test exclusion power thresholds at selected frequencies and test separation distances are illustrated in the following table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>MHz</th> <th>< 50</th> <th>50</th> <th>60</th> <th>70</th> <th>80</th> <th>90</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>237</td> <td>474</td> <td>481</td> <td>487</td> <td>494</td> <td>501</td> <td>507</td> </tr> <tr> <td>50</td> <td>308</td> <td>617</td> <td>625</td> <td>634</td> <td>643</td> <td>651</td> <td>660</td> </tr> <tr> <td>10</td> <td>474</td> <td>948</td> <td>961</td> <td>975</td> <td>988</td> <td>1001</td> <td>1015</td> </tr> </tbody> </table> <p>Calculation based on the above formula: Separation Distance = 30 mm Field strength @3m = 72.0 dBμV/m EIRP = -23.23 dBm = 0.004 mW Frequency = 13.56 MHz Exclusion threshold = $237 \times [1 + \log(100/13.56(\text{MHz}))] \times 0.5 = 221.3 \text{ mW}$ The EIRP is below the threshold, therefore the product exempt from the SAR test requirements</p>	MHz	< 50	50	60	70	80	90	100	100	237	474	481	487	494	501	507	50	308	617	625	634	643	651	660	10	474	948	961	975	988	1001	1015
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2. Attestation

ATTESTATION: I attest that the testing was performed or supervised by me; that the test measurements were made in accordance with the above-mentioned departmental standard(s), and that the radio equipment identified in this application has been subject to all applicable test conditions specified in the departmental standards and all of the requirements of the standards have been met.

Signature:	
Date:	April 27, 2020
Name:	Redwanul Rasel, EMC Specialist