



IMQ S.p.A. - Società con Socio Unico  
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## RF Exposure Evaluation

performed in accordance with  
FCC Rules: Code of Federal Regulations and KDB 447498

<b>PRODUCT</b>	RF Module
<b>MODEL(s) TESTED</b>	SPSGRFC-915
<b>FCC ID</b>	S9NSPSGRFC
<b>TRADE MARK(s)</b>	STMicroelectronics

<b>APPLICANT</b>	STMicroelectronics S.r.l. ~ Centro Direzionale Colleoni - Palazzo Andromeda 3 I-20864 Agrate Brianza (MB)
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### Revision Sheet

Release No.	Date	Revision Description
Rev. 0	2016-10-04	First edition



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### TEST REQUIREMENT

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines §1.1307(b)(1).

EUT classification (fixed, mobile or portable devices)	Portable according to § 2.1093(b) of this Chapter
LIMITS	According to § 2.1093 of this Chapter, by means of the following guidelines: OET Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies (447498 D01 General RF Exposure Guidance v06)

### SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and $\geq 50$ mm

447498 D01 General RF Exposure Guidance v06 – Appendix A

MHz	50	60	70	80	90	mm
100	474	481	487	494	501	SAR Test Exclusion Threshold (mW)
150	387	397	407	417	427	
300	274	294	314	334	354	
450	224	254	284	314	344	
835	164	220	275	331	387	
900	158	218	278	338	398	
1500	122	222	322	422	522	
1900	108	209	309	409	509	
<b>2450</b>	<b>96</b>	196	296	396	496	
3600	79	179	279	379	479	
5200	66	166	266	366	466	
5400	65	165	265	365	465	
5800	62	162	262	362	462	

The *test separation distances*  $\geq 50$  mm is applied to determine SAR test exclusion.



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**SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm**

447498 D01 General RF Exposure Guidance v06 § 4.3

**Modulation 2FSK**

Channel No.	Frequency (MHz)	Conducted power (dBm)	Conducted power (mW)	Distance (mm)	$\frac{\text{max. power (mW)}}{\text{min. distance (mm)}} \times \sqrt{f_{\text{(GHz)}}}$	Limits
Lowest	903.5	11.05	12.74	5	2.421	≤ 3.0 for 1-g head SAR or ≤ 7.5 for 10-g extremity SAR
Middle	915	10.82	12.08	5	2.311	
Highest	926.3	10.64	11.59	5	2.231	

**Modulation GFSK**

Channel No.	Frequency (MHz)	Conducted power (dBm)	Conducted power (mW)	Distance (mm)	$\frac{\text{max. power (mW)}}{\text{min. distance (mm)}} \times \sqrt{f_{\text{(GHz)}}}$	Limits
Lowest	903.5	10.80	12.02	5	2.286	≤ 3.0 for 1-g head SAR or ≤ 7.5 for 10-g extremity SAR
Middle	915	10.63	11.56	5	2.212	
Highest	926.3	10.55	11.35	5	2.185	

**Modulation MSK**

Channel No.	Frequency (MHz)	Conducted power (dBm)	Conducted power (mW)	Distance (mm)	$\frac{\text{max. power (mW)}}{\text{min. distance (mm)}} \times \sqrt{f_{\text{(GHz)}}}$	Limits
Lowest	903.5	10.77	11.94	5	2.270	≤ 3.0 for 1-g head SAR or ≤ 7.5 for 10-g extremity SAR
Middle	915	10.59	11.46	5	2.191	
Highest	926.3	10.48	11.17	5	2.150	

**TEST RESULT**

This value is less than the low threshold limit. No SAR test is required..