



RF Exposure evaluation for portable use

Model: NINA-B111 and NINA-B112

FCC ID: XPYNINAB1

Appendix A

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

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	<i>SAR Test Exclusion Threshold (mW)</i>
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

Note: 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g SAR Test Exclusion Thresholds indicated above. These thresholds do not apply, by extrapolation or other means, to occupational exposure limits.

NINA-B1 Peak output power = 4.2 dBm = 2.63 mW

Antenna gain = 3 dBi (numerical = 1.995)

EIRP = 2.63 x 1.995 = 5.24 mW

Separation distance = 5 mm

2.402 GHz < f < 2.480 GHz (where f is the frequency)

SAR test exclusion thresholds are determined by the following: $(5.24 / 5) \times \sqrt{2.480} = 2.501 < 3.0$ for 1-g SAR. (4.3.1 (a) of KDB 447498 D01 General RF Exposure Guidance v06)

Yours sincerely,

Imad Hjije