

MPE Calculation

Model Name : **SP119**
 FCC ID : **S7A-SP119**

Device Category : **Portable device**
 Separation distance : **40.0 mm**

KDB 447498 - 4.3.1 a)

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
 $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where

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

Modulation	Frequency (MHz)	Min. Test separation distance	Measured Maximum Average power	Tune-up tolerance	Max. Power with tune-up tolerance		Standalone SAR Test exclusion thresholds for 100MHz to 6GHz at test separation distance ≤ 50 mm	Limit	Result
		(mm)	(dBm)	(dB)	(dBm)	(mW)			
GFSK	2402	40.00	16.82	± 0.50	17.32	53.95	2.0904	3.00	PASS
	2441		17.09		17.59	57.41	2.2425	3.00	PASS
	2480		16.82		17.32	53.95	2.1241	3.00	PASS
$\pi/4$ DQPSK	2402	40.00	7.18	± 0.50	7.68	5.86	0.2271	3.00	PASS
	2441		7.68		8.18	6.58	0.2569	3.00	PASS
	2480		7.31		7.81	6.04	0.2378	3.00	PASS
8DPSK	2402	40.00	7.92	± 0.50	8.42	6.95	0.2693	3.00	PASS
	2441		8.39		8.89	7.74	0.3025	3.00	PASS
	2480		8.04		8.54	7.14	0.2813	3.00	PASS
BT LE	2402	40.00	1.76	± 0.50	2.26	1.68	0.0652	3.00	PASS
	2442		2.51		3.01	2.00	0.0781	3.00	PASS
	2480		2.10		2.60	1.82	0.0716	3.00	PASS