

MPE Calculation

Model Name : **SP122**

FCC ID : **S7A-SP122**

Device Category : **Portable device**

Separation distance : **11.0 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

- $f(\text{GHz})$ 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	11.00	5.68	± 0.50	6.18	4.15	0.5846	3.00	PASS
	2441		5.98		6.48	4.45	0.6315	3.00	PASS
	2480		6.02		6.52	4.49	0.6424	3.00	PASS
$\pi/4$ DQPSK	2402	11.00	5.66	± 0.50	6.16	4.13	0.5820	3.00	PASS
	2441		5.98		6.48	4.45	0.6315	3.00	PASS
	2480		6.02		6.52	4.49	0.6424	3.00	PASS
8DPSK	2402	11.00	5.84	± 0.50	6.34	4.31	0.6066	3.00	PASS
	2441		6.14		6.64	4.61	0.6552	3.00	PASS
	2480		6.17		6.67	4.65	0.6650	3.00	PASS
BT LE	2402	11.00	1.18	± 0.50	1.68	1.47	0.2074	3.00	PASS
	2442		1.59		2.09	1.62	0.2299	3.00	PASS
	2480		1.63		2.13	1.63	0.2338	3.00	PASS
MESH	2410	11.00	6.56	± 0.50	7.06	5.08	0.7172	3.00	PASS
	2445		6.20		6.70	4.68	0.6649	3.00	PASS
	2475		5.53		6.03	4.01	0.5733	3.00	PASS