

MPE Calculation

Model Name : **SP100**
FCC ID : **S7A-SP100**

Device Category : **Portable device**
Separation distance : **38.0 mm**

KDB 447498 - 3.4.1 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	38.00	17.61	± 0.50	18.11	64.71	2.6394	3.00	PASS
	2441		17.84		18.34	68.23	2.8054	3.00	PASS
	2480		17.94		18.44	69.82	2.8936	3.00	PASS
$\pi/4$ DQPSK	2402	38.00	6.51	± 0.50	7.01	5.02	0.2049	3.00	PASS
	2441		8.28		8.78	7.55	0.3105	3.00	PASS
	2480		9.30		9.80	9.55	0.3958	3.00	PASS
8DPSK	2402	38.00	8.12	± 0.50	8.62	7.28	0.2968	3.00	PASS
	2441		8.84		9.34	8.59	0.3532	3.00	PASS
	2480		9.42		9.92	9.82	0.4069	3.00	PASS
BT LE	2402	38.00	5.45	± 0.50	5.95	3.94	0.1605	3.00	PASS
	2442		6.15		6.65	4.62	0.1901	3.00	PASS
	2480		5.97		6.47	4.44	0.1838	3.00	PASS