

MPE Calculation

Model Name : **SP170**

FCC ID : **S7A-SP170**

Device Category : **Portable device**

Separation distance : **40.9 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:
[(max. power of channel, including tune-up tolerance, mW) / (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	40.90	16.40	± 1.00	17.40	54.95	2.0824	3.00	PASS
	2441		16.97		17.97	62.66	2.3936	3.00	PASS
	2480		16.69		17.69	58.75	2.2621	3.00	PASS
$\pi/4$ DQPSK	2402	40.90	3.20	± 1.00	4.20	2.63	0.0997	3.00	PASS
	2441		4.95		5.95	3.94	0.1503	3.00	PASS
	2480		5.98		6.98	4.99	0.1921	3.00	PASS
8DPSK	2402	40.90	3.64	± 1.00	4.64	2.91	0.1103	3.00	PASS
	2441		5.48		6.48	4.45	0.1698	3.00	PASS
	2480		6.59		7.59	5.74	0.2211	3.00	PASS
BT LE	2402	40.90	-5.43	± 1.00	-4.43	0.36	0.0137	3.00	PASS
	2442		-3.70		-2.70	0.54	0.0205	3.00	PASS
	2480		-2.60		-1.60	0.69	0.0266	3.00	PASS