

MPE Calculation

Model Name : **SP142**

FCC ID : **S7A-SP142**

Device Category : **Portable device**

Separation distance : **40.5 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	40.50	3.46	± 0.50	3.96	2.49	0.0952	3.00	PASS
	2441		3.63		4.13	2.59	0.0998	3.00	PASS
	2480		3.26		3.76	2.38	0.0924	3.00	PASS
$\pi/4$ DQPSK	2402	40.50	0.57	± 0.50	1.07	1.28	0.0490	3.00	PASS
	2441		-0.66		-0.16	0.96	0.0372	3.00	PASS
	2480		-2.21		-1.71	0.67	0.0262	3.00	PASS
8DPSK	2402	40.50	1.55	± 0.50	2.05	1.60	0.0614	3.00	PASS
	2441		-0.06		0.44	1.11	0.0427	3.00	PASS
	2480		-1.78		-1.28	0.74	0.0290	3.00	PASS
BT LE	2402	40.50	-2.30	± 0.50	-1.80	0.66	0.0253	3.00	PASS
	2442		-1.83		-1.33	0.74	0.0284	3.00	PASS
	2480		-1.82		-1.32	0.74	0.0287	3.00	PASS
MESH	2410	40.50	14.73	± 0.50	15.23	33.34	1.2781	3.00	PASS
	2445		14.18		14.68	29.40	1.1350	3.00	PASS
	2475		12.53		13.03	20.09	0.7804	3.00	PASS