

MPE Calculation

Model Name : **SP144**
 FCC ID : **S7A-SP144**

Device Category : **Portable device**
 Separation distance : **42.6 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	42.60	13.18	± 0.50	13.68	23.33	0.8489	3.00	PASS
	2441		15.41		15.91	38.99	1.4301	3.00	PASS
	2480		15.02		15.52	35.65	1.3177	3.00	PASS
$\pi/4$ DQPSK	2402	42.60	3.99	± 0.50	4.49	2.81	0.1023	3.00	PASS
	2441		5.82		6.32	4.29	0.1572	3.00	PASS
	2480		5.59		6.09	4.06	0.1503	3.00	PASS
8DPSK	2402	42.60	4.80	± 0.50	5.30	3.39	0.1233	3.00	PASS
	2441		6.65		7.15	5.19	0.1903	3.00	PASS
	2480		6.43		6.93	4.93	0.1823	3.00	PASS
BT LE	2402	42.60	2.02	± 0.50	2.52	1.79	0.0650	3.00	PASS
	2442		4.18		4.68	2.94	0.1078	3.00	PASS
	2480		3.95		4.45	2.79	0.1030	3.00	PASS
MESH	2410	42.60	16.75	± 0.50	17.25	53.09	1.9346	3.00	PASS
	2445		16.91		17.41	55.08	2.0218	3.00	PASS
	2475		16.73		17.23	52.84	1.9515	3.00	PASS