

MPE Calculation

Model Name : **SP140**

FCC ID : **S7A-SP140**

Device Category : **Portable device**

Separation distance : **23.8 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	23.80	6.31	± 0.50	6.81	4.80	0.3124	3.00	PASS
	2441		6.30		6.80	4.79	0.3142	3.00	PASS
	2480		6.19		6.69	4.67	0.3088	3.00	PASS
$\pi/4$ DQPSK	2402	23.80	6.30	± 0.50	6.80	4.79	0.3117	3.00	PASS
	2441		6.28		6.78	4.76	0.3128	3.00	PASS
	2480		6.16		6.66	4.63	0.3067	3.00	PASS
8DPSK	2402	23.80	6.97	± 0.50	7.47	5.58	0.3637	3.00	PASS
	2441		6.91		7.41	5.51	0.3616	3.00	PASS
	2480		6.83		7.33	5.41	0.3578	3.00	PASS
BT LE	2402	23.80	2.27	± 0.50	2.77	1.89	0.1232	3.00	PASS
	2442		2.28		2.78	1.90	0.1245	3.00	PASS
	2480		2.18		2.68	1.85	0.1226	3.00	PASS
MESH	2410	23.80	9.07	± 0.50	9.57	9.06	0.5908	3.00	PASS
	2445		8.74		9.24	8.39	0.5515	3.00	PASS
	2475		8.08		8.58	7.21	0.4767	3.00	PASS