

MPE Calculation

Model Name : **SP131**

FCC ID : **S7A-SP131**

Device Category : **Portable device**

Separation distance : **45.0 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	45.00	15.58	± 0.50	16.08	40.55	1.3966	3.00	PASS
	2441		17.39		17.89	61.52	2.1359	3.00	PASS
	2480		16.24		16.74	47.21	1.6520	3.00	PASS
$\pi/4$ DQPSK	2402	45.00	6.02	± 0.50	6.52	4.49	0.1546	3.00	PASS
	2441		7.44		7.94	6.22	0.2161	3.00	PASS
	2480		6.33		6.83	4.82	0.1687	3.00	PASS
8DPSK	2402	45.00	6.73	± 0.50	7.23	5.28	0.1820	3.00	PASS
	2441		8.15		8.65	7.33	0.2544	3.00	PASS
	2480		7.06		7.56	5.70	0.1995	3.00	PASS
BT LE	2402	45.00	2.65	± 0.50	3.15	2.07	0.0711	3.00	PASS
	2442		3.52		4.02	2.52	0.0876	3.00	PASS
	2480		2.52		3.02	2.00	0.0701	3.00	PASS
MESH	2410	45.00	18.28	± 0.50	18.78	75.51	2.6049	3.00	PASS
	2445		18.18		18.68	73.79	2.5641	3.00	PASS
	2475		18.31		18.81	76.03	2.6581	3.00	PASS