

MPE Calculation

Model Name : **SP130**

FCC ID : **S7A-SP130**

Device Category : **Portable device**

Separation distance : **36.0 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	36.00	7.27	± 0.50	7.77	5.98	0.2576	3.00	PASS
	2441		7.26		7.76	5.97	0.2591	3.00	PASS
	2480		6.99		7.49	5.61	0.2454	3.00	PASS
$\pi/4$ DQPSK	2402	36.00	5.91	± 0.50	6.41	4.38	0.1884	3.00	PASS
	2441		5.89		6.39	4.36	0.1890	3.00	PASS
	2480		5.65		6.15	4.12	0.1803	3.00	PASS
8DPSK	2402	36.00	6.01	± 0.50	6.51	4.48	0.1927	3.00	PASS
	2441		6.01		6.51	4.48	0.1943	3.00	PASS
	2480		5.76		6.26	4.23	0.1849	3.00	PASS
BT LE	2402	36.00	3.59	± 0.50	4.09	2.56	0.1104	3.00	PASS
	2442		3.57		4.07	2.55	0.1108	3.00	PASS
	2480		3.38		3.88	2.44	0.1069	3.00	PASS
MESH	2410	36.00	17.41	± 0.50	17.91	61.80	2.6651	3.00	PASS
	2445		17.57		18.07	64.12	2.7851	3.00	PASS
	2475		17.13		17.63	57.94	2.5321	3.00	PASS