

MPE Calculation

Model Name : **SP148**

Device Category : **Portable device**

FCC ID : **S7A-SP148**

Separation distance : **34.5 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(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	34.50	7.32	± 1.00	8.32	6.79	0.3051	3.00	PASS
	2441		7.32		8.32	6.79	0.3076	3.00	PASS
	2480		6.99		7.99	6.30	0.2873	3.00	PASS
$\pi/4$ DQPSK	2402	34.50	4.14	± 1.00	5.14	3.27	0.1467	3.00	PASS
	2441		4.45		5.45	3.51	0.1588	3.00	PASS
	2480		4.28		5.28	3.37	0.1540	3.00	PASS
8DPSK	2402	34.50	4.30	± 1.00	5.30	3.39	0.1522	3.00	PASS
	2441		4.59		5.59	3.62	0.1640	3.00	PASS
	2480		4.41		5.41	3.48	0.1586	3.00	PASS
BT LE	2402	34.50	2.79	± 1.00	3.79	2.39	0.1075	3.00	PASS
	2442		3.07		4.07	2.55	0.1156	3.00	PASS
	2480		2.89		3.89	2.45	0.1118	3.00	PASS
MESH1	2410	34.50	16.18	± 1.00	17.18	52.24	2.3507	3.00	PASS
	2445		16.21		17.21	52.60	2.3841	3.00	PASS
	2475		15.06		16.06	40.36	1.8406	3.00	PASS