

MPE Calculation

Model Name : **OUTLANDER**
FCC ID : **S7A-SP176**

Device Category : **Portable device**
Separation distance : **33.8 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	33.80	6.03	± 1.00	7.03	5.05	0.2314	3.00	PASS
	2441		5.14		6.14	4.11	0.1900	3.00	PASS
	2480		3.08		4.08	2.56	0.1192	3.00	PASS
$\pi/4$ DQPSK	2402	33.80	3.79	± 1.00	4.79	3.01	0.1382	3.00	PASS
	2441		3.12		4.12	2.58	0.1194	3.00	PASS
	2480		0.86		1.86	1.53	0.0715	3.00	PASS
8DPSK	2402	33.80	3.75	± 1.00	4.75	2.99	0.1369	3.00	PASS
	2441		2.85		3.85	2.43	0.1122	3.00	PASS
	2480		0.82		1.82	1.52	0.0708	3.00	PASS
BT LE	2402	33.80	2.11	± 1.00	3.11	2.05	0.0938	3.00	PASS
	2442		1.35		2.35	1.72	0.0794	3.00	PASS
	2480		-1.04		-0.04	0.99	0.0462	3.00	PASS
MESH	2410	33.80	17.15	± 1.00	18.15	65.31	2.9998	3.00	PASS
	2445		16.53		17.53	56.62	2.6195	3.00	PASS
	2475		15.83		16.83	48.19	2.2432	3.00	PASS