

# FCC RF Exposure

EUT Description:Haptique RS90  
 Test type.:RS90  
 Series model: N/A  
 Test Report No.: FCS202409194  
 FCC ID: 2BLCE-RS90  
 Equipment type: Portable Device

## 1. Test Procedure

According to KDB 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where } f(\text{GHz}) \text{ is the RF channel transmit frequency in GHz}$$

Power and distance are rounded to the nearest mW and mm before calculation The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6GHz.

When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

## 2. Test Result of RF Exposure Evaluation

BT:

Mode	Channel Freq. (MHz)	Maximum Conducted Output Power(PK)	Antenna Gain (dBi)	Antenna gain numeric	Max tune-up power (W)
GFSK	2402	4.01	0.65	1.61	0.002517677
	2441	4.20	0.65	1.61	0.002630268
	2480	4.63	0.65	1.61	0.002904023

WIFI:

Modulation	Channel Freq. (MHz)	Maximum Conducted Output Power(PK)	Antenna Gain (dBi)	Antenna gain numeric	Max tune-up power (W)
802.11b	2412	9.50	0.65	1.61	0.008912509
	2437	9.48	0.65	1.61	0.00887156
	2462	9.42	0.65	1.61	0.008749838
802.11g	2412	8.71	0.65	1.61	0.007430191
	2437	8.44	0.65	1.61	0.006982324
	2462	8.29	0.65	1.61	0.00674528
802.11n	2412	8.91	0.65	1.61	0.007780366
	2437	8.57	0.65	1.61	0.00719449
	2462	8.48	0.65	1.61	0.007046931

WiFi:  $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] = 8.912509 / 5 \cdot \sqrt{2.412} = 2.76833 \leq 3.0$  Threshold at which no SAR required is and  $\leq 3.0$  for 1-g SAR, Separation distance is 5mm.

BT:  $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] = 2.904023 / 5 \cdot \sqrt{2.402} = 0.91465 \leq 3.0$  Threshold at which no SAR required is and  $\leq 3.0$  for 1-g SAR, Separation distance is 5mm.

Conclusion: no SAR required

Note: Single antenna has no dual simultaneous function