

3M EMC Laboratory

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4.8	4.8 RF Exposure Evaluation		
Reference Standard(s):		 	☐ MPE ☐ SAR Evaluation ☑ SAR Test Exclusion
Frequency Range(s):		☐ 911-918.5MHz ☑ 2402-2480.0MHz ☐	
Antenna Separation Distance:		>40mm	
RF Exposure Conditions:		Portable (Body-worn)	
2.4GHz Antenna Gain:		2.7dBi	
BT EDR the source-based conducted output power:		3.0mW(4.8dBm)*0.7(FHSS worst case duty cycle)= 2.1mW(3.2dBm)	
BT EDR EIRP/ERP output power:		EIRP =3.2dBm + 2.7dBi=5.9dBm, ERP =5.9dBm - 2.15dB=3.75dBm(2.4mW)	
BLE the source-based conducted output power:		1.3mW(1dBm)*0.85(worst case duty cycle)=1.1mW(0.4dBm)	
BLE EIRP/ERP output power: E		EIRP =0.4dBm + 2.7dBi=3.1dBm, ERP =3.1dBm - 2.15dB= 0.95dBm(1.2mW)	
The SAR Exclusion Threshold Level			
FCC Part 2.1093		77mW<40mm @2.45GHz	
RSS 102, Issue 5		173mW>40mm @2.45GHz	
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Note:			

