RF Exposure Evaluation
FCC ID: 2AE5PSW-620

1. Client Information

Applicant	:	SW Technology Limited
Address	:	Unit 1202, 12/F Mirror Tower 61 Mody RD TST East KL, Hong Kong
Manufacturer	:	Shenzhen Hengbao Ying Photoelectricity Co.,Ltd.
Address	:	Floor 3rd, Floor 4rd, Factory Dongyuan, No.28 of West, Bei huan Road, Longteng Community, ShiYan Sub District, Baoan District, Shenzhen, China

2. General Description of EUT

EUT Name	:	Car Radio	
Models No.	:	SW-620	
Model difference	:	N/A	
Product Description	:	Operation Frequency: Bluetooth:2402~2480MHz	
		Number of Channel:	Bluetooth:79 Channels
		Max Peak Output Power:	Bluetooth: 5.644 dBm(8-DPSK)
		Antenna Gain:	0 dBi PCB Antenna
		Modulation Type:	GFSK 1Mbps(1 Mbps) π/4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)
Power Supply	:	DC power by Battery.	
Power Rating	:	DC 12V Battery.	
Connecting I/O Port(S)	:	Please refer to the User's Manual	

Note:

More test information about the EUT please refer the RF Test Report.

TB-RF-074-1.0

SAR Test Exclusion Calculations

1. **FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v05r02.**

   (1) Clause 4.3: General SAR test reduction and exclusion guidance

   Sub clause 4.31: Standalone SAR test exclusion considerations

   1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance≤5 mm are determined by:

   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation, mm)]*[$\sqrt{f_{(GHz)}}$] ≤3.0 for 1-g SAR

   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation, mm)]*[$\sqrt{f_{(GHz)}}$] ≤7.5.0 for 10-g SAR

2.
Calculation:

Test separation: 5mm					
Bluetooth Mode (GFSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	5.451	±0.5	3.936	1.220	**3.0**
2.441	5.080	±0.5	3.614	1.129	**3.0**
2.480	4.468	±0.5	3.139	0.989	**3.0**
Bluetooth Mode (π/4-DQPSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	5.463	±0.5	3.947	1.224	**3.0**
2.441	4.586	±0.5	3.226	1.008	**3.0**
2.480	3.645	±0.5	2.597	0.818	**3.0**
Bluetooth Mode (8-DPSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	5.644	±0.5	4.115	1.276	**3.0**
2.441	4.909	±0.5	3.475	1.086	**3.0**
2.480	4.132	±0.5	2.905	0.915	**3.0**

So standalone SAR measurements are not required.