

Maximum Permissive Exposure

FCC ID: AK8HTS100F
EUT: Sound Bar
M/N: HT-S100F

1. According to FCC CFR 47 §1.1310, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

Table 1 Limits for Maximum Permissible Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits for Occupational / Control Exposures (f = frequency)				
30-300	61.4	0.163	1.0	6
300-1500	---	---	f/300	6
1500-100,000	---	---	5.0	6
(B) Limits for General Population / Uncontrolled Exposures (f = frequency)				
30-300	27.5	0.073	0.2	30
300-1500	---	---	f/1500	30
1500-100,000	---	---	1.0	30

2. MPE Calculation

Sony Corporation declares that the product described above has been evaluated and found to comply with the RF exposure limits for humans, as specified based on ANSI/FCC recommendation.

RF Exposure Calculations: $S = (P * G) / (4 * \pi * r^2)$ or $r = \sqrt{(P * G) / (4 * \pi * S)}$

2.1. Estimation Result

Mode	CH	Frequency (MHz)	PK Output power (dBm)	Output power (mW)	antenna Gain (dBi)	antenna Gain (linear)	MPE (mW/cm ²)
GFSK (DSS)	CH0	2402	2.437	1.753	2	1.585	0.000553
	CH39	2441	4.822	3.035	2	1.585	0.000958
	CH78	2480	6.563	4.532	2	1.585	0.001430
8-DPSK (DSS)	CH0	2402	4.204	2.633	2	1.585	0.000831
	CH39	2441	6.488	4.455	2	1.585	0.001405
	CH78	2480	7.943	6.227	2	1.585	0.001964

Based on safety distance (r) **20cm**, the antenna gain (G) is **1.585 Numerical**, and the highest power output (P) is **6.227mW**, the power density (S) is **0.001964mW/cm²**.