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Maximum Permissive Exposure

FCC ID: AK8HTS100FV1 Product Name: 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	Electric Field	Magnetic Field Power Density		Average Time		
(MHz)	Strength (V/m)	V/m) Strength (A/m) (mW/cm ²)		(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

We 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* π * r²) or r = $\sqrt{(P * G) / (4 * \pi * S)}$ Note: π =3.1416 in this report.

2.1. Estimation Result

EUT: Sound Bar		
M/N: HT-S100F		
Date: 2023-10-23	Pressure: 101.6±1.0 kpa	Humidity: 53.3±3.0%
Tested by: Carl	Test Site: RF site	Temperature:22.7±0.6°C

Test Mode	Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
BDR	3.804	2.40	2.36	1.72	0.0008
EDR	4.916	3.10	2.36	1.72	0.0011

Based on safety distance (r) **20cm**, the antenna gain (G) numerical as below:

Antenna System		
Type of Antenna	IFA Antenna	
Antenna Peak Gain	2.36dBi	

and the EDR highest power output (P) is **3.10mW**; the EDR power density (S) is **0.0011 mW/cm²**.