Ear Force Z300 Wireless Audio Headset.

SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table.

EUT has Wi-Fi transmitter operating in 2400 – 2483.5 MHz and 5,150 – 5,250 MHz bands and a Bluetooth transmitter. The applicable limits for the EUT are the grayed out cells in the table below.

The headphones are constructed such that the minimum separation distance between the Transmitters and head is 25mm.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

MHz	30	35	40	45	50	mm
150	232	271	310	349	387	SAR Test Exclusion Threshold (mW)
300	164	192	219	246	274	
450	134	157	179	201	224	
835	98	115	131	148	164	
900	95	111	126	142	158	
1500	73	86	98	110	122	
1900	65	76	87	98	109	
2450	57	67	77	86	96	
3600	47	55	63	71	79	
5200	39	46	53	59	66	
5400	39	45	52	58	65	
5800	37	44	50	56	62	

Reference - FCC KDB 447498 D01 General RF Exposure Guidance v05 Appendix A

Evaluation.

EUT has Wi-Fi transmitter operating in 2400 – 2483.5 MHz and 5,150 – 5,250 MHz bands and a Bluetooth transmitter. It is possible for multiple transmitters to be on simultaneously in different bands.

The highest power levels measured are used in the following calculations.

Frequency (MHz)	Maximum Power (dBm)	Maximum Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	EIRP Limit (mW)	% of limit
2462	8.72	-1.5	7.22	5.27	48	11.0
2402	0.70	2.8	3.50	2.24	48	4.7
2400 – 2483.5 MHz band Total			8.76	7.51	48	15.7
5180	8.92	3.3	12.22	16.67	33	50.5
					Total %	**66.2**

Conclusion: No SAR required

EUT

0mm
50mm
100mm
150mm
200mm
250mm
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