






## TEST REPORT

<b>Report No.:</b>	<b>E201512317298-2</b>	<b>Application No.:</b>	<b>E201512317298</b>
<b>Client:</b>	Cleer Limited		
<b>Address:</b>	Unit518, Lakeside 1, Science Park West Ave. HK Science Park, HK. N.T. Hong Kong		
<b>Sample Description:</b>	Bluetooth headphone		
<b>Model:</b>	DU wireless		
<b>Adding Model:</b>	/		
<b>FCC ID</b>	2AETW-BT201601		
<b>Test Specification:</b>	FCC part §2.1093		
<b>Test Date:</b>	2016-01-06 to 2016-03-01		
<b>Issue Date:</b>	2016-03-03		
<b>Test Result:</b>	PASS		
<b>Prepared By:</b>	<b>Reviewed By:</b>	<b>Approved By:</b>	
Bruce Li / Test Engineer	Lynn Xiao / Technical Manager	Yong Dai / Technical Manager	
			
Date:2016-03-03	Date:2016-03-03	Date:2016-03-03	
<b>Other Aspects:</b>			
/			
<b>Abbreviations:</b> ok / P = passed; fail / F = failed; n.a. / N = not applicable			
The test result in this test report refers exclusively to the presented test sample. This report shall not be reproduced except in full, without the written approval of GRGT.			

## RF Exposure Compliance Requirement

### 1. LIMITS

According 447498 D01 General RF Exposure Guidance v06 section 4.3.1 (a) :

For 100 MHz to 6 GHz and *test separation distances* ≤ 50 mm, the 1-g and 10-g SAR *test exclusion thresholds* are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR, and  $\leq 7.5$  for 10-g extremity SAR, where

*f*(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison

The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

This is equivalent to the formula written as:  $[(\text{max. power of channel, including tune-up tolerance, mW}) / (60 / \sqrt{f(\text{GHz})} \text{ mW})] \cdot [20 \text{ mm} / (\text{min. test separation distance, mm})] \leq 1.0$  for 1-g SAR; also see Appendix A for approximate exclusion threshold numerical values at selected frequencies and distances.

### Appendix A

#### *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. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	<i>SAR Test Exclusion Threshold (mW)</i>
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	

**Note:** 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g *SAR Test Exclusion Thresholds* indicated above. These thresholds do not apply, by extrapolation or other means, to occupational exposure limits.

## 2. EUT RF Exposure

The Max Output Power is 8.98dBm (7.91mW) in 2480MHz of GFSK;

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] = (7.91/5) \sqrt{2.48} = 2.49 \leq 3.0$

So 1-g SAR test exclusion thresholds is applied.

According to Appendix A, Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table.

Frequency	Distance(mm)	SAR Test Exclusion Threshold
2450MHz	5	10mW(10dBm)

The Max Conducted Peak Output Power is 5.09dBm (3.23mW) in 2480MHz of GFSK;

The max antenna gain of this antenna is 3.89dBi.

3.89dB logarithmic terms convert to numeric result is nearly 2.45.

$EIRP = P \times G = 3.23\text{mW} \times 2.45 = 7.91 \text{ mW}$ .

SAR requirement :S=10mw

$EIRP < S$

**So the SAR report is not required.**