SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

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FCC MPE REPORT

Application No.:	SHEM1306001141RF
Applicant:	Loctek Visual Technology Corp.
FCC ID:	2AALVBT115
Equipment Under Test (EUT): **NOTE:** The following sample(s) submitted was/were identified on behalf of the client as	
EUT Name:	Bluetooth headset
Brand Name:	N/A
Model No:	BT110
Add Model No.:	BT111, BT112, BT113, BT114, BT115, BT116
Fundamental Frequency :	2402MHz~2480MHz
Standards:	FCC Rules 47 CFR §2.1091 FCC OET Bulletin 65 supplement C
Date of Receipt:	June 21, 2013
Date of Test:	June 28, 2013 to July 01, 2013
Date of Issue:	August 01, 2013
Test Result :	**PASS ***

* In the configuration tested, the EUT complied with the standards specified above.

Tony Wu
E&E Section Manager
SGS-CSTC (Shanghai) Co., Ltd.

2 Version

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
00	/	July 03, 2013	/	Original

Authorized for issue by:				
Engineer		Zenger Zhang **Print Name**		Zenger Zhang
Clerk		Susie Liu **Print Name**		Susie Liu
Reviewer		Keny Xu **Print Name**		Keny.xu

3 Contents

4 General Information

4.1 Client Information

Applicant :	Loctek Visual Technology Corp.
Applicant Address:	588 QIHANG SOUTH RD BINHAI INDUSTRIAL ZONE YINZHOU DISTRICT NINGBO, ZHEJIANG 315145 CHINA
Manufacturer:	Loctek Visual Technology Corp.
Manufacturer Address:	588 QIHANG SOUTH RD BINHAI INDUSTRIAL ZONE YINZHOU DISTRICT NINGBO, ZHEJIANG 315145 CHINA

4.2 General Description of E.U.T.

Product Name	Bluetooth headset
Brand Name:	N/A
Model No:	BT110
Add Model No.:	BT111, BT112, BT113, BT114, BT115, BT116

4.3 Technical Specifications

Operation Frequency:	2402MHz~2480MHz
Modulation Technique:	3.0+EDR
Modulation Type:	GFSK, π/4DQPSK, 8DPSK
Number of Channel:	79
Power Supply:	DC 3.7V
Antenna Type	Integral
Antenna Gain	2.0dBi

4.4 Test Location

All tests were performed at SGS E&E EMC lab

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.
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4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L0599)**

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. Date of expiry: 2014-07-26.

- **FCC – Registration No.: 402683**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered and fully described in a report filed with the Federal Communications Commission (FCC). The acceptance letter from the FCC is maintained in our files. Registration No.: 402683, Expiry Date: 2015-02-22.

- **Industry Canada (IC) – IC Assigned Code: 8617A**

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A. Expiry Date: 2014-09-20.

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3868 and C-4336 respectively. Date of Registration: 2012-05-29. Date of Expiry: 2015-05-28.

5 RF Exposure Compliance Requirement

5.1 Standard Requirement

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.2 Limit

According to KDB 447498D01 General RF Exposure Guidance v05 <Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies>.

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.

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	

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.

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.

MHz	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	mm
100	474	481	487	494	501	507	514	521	527	534	541	547	554	561	567	
150	387	397	407	417	427	437	447	457	467	477	487	497	507	517	527	
300	274	294	314	334	354	374	394	414	434	454	474	494	514	534	554	
450	224	254	284	314	344	374	404	434	464	494	524	554	584	614	644	
835	164	220	275	331	387	442	498	554	609	665	721	776	832	888	943	
900	158	218	278	338	398	458	518	578	638	698	758	818	878	938	998	
1500	122	222	322	422	522	622	722	822	922	1022	1122	1222	1322	1422	1522	mW
1900	109	209	309	409	509	609	709	809	909	1009	1109	1209	1309	1409	1509	
2450	96	196	296	396	496	596	696	796	896	996	1096	1196	1296	1396	1496	
3600	79	179	279	379	479	579	679	779	879	979	1079	1179	1279	1379	1479	
5200	66	166	266	366	466	566	666	766	866	966	1066	1166	1266	1366	1466	
5400	65	165	265	365	465	565	665	765	865	965	1065	1165	1265	1365	1465	
5800	62	162	262	362	462	562	662	762	862	962	1062	1162	1262	1362	1462	

6 RF Exposure Evaluation Result

The Max. Conducted Peak Output Power is -4.11dBm (0.39mW) based on the FCC RF report <SHEM130600114101V00>.

The best case gain of the antenna is 2.0dBi (convert to numeric 1.58).

According to the formula calculate the EIRP test result:

EIRP = P*G = 0.39*1.58 = 0.62mW ①

SAR test exclusion power threshold is 10mW (at 5 mm distance, on 2450MHz band.) ②

① < ②

So the SAR test is not required.

7 EUT Constructional Details

Refer to the < BT110_External Photos > & < BT110_Internal Photos >.

THE END OF REPORT